A PERFORMANCE-AND-ANALYSIS APPROACH TO A CADENTIAL AMBIGUITY: CHOPIN'S PIANO SONATA NO. 2 IN B-FLAT MINOR, OP. 35, FIRST MOVEMENT

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Pianists often have trouble in determining where a phrase ends, or in other words, cadence identification. This is especially true of certain cadences that can be considered either as half cadences or authentic cadences. This analytically ambiguous cadential point can result in different performance decisions, so pianists should make informed decisions about what kind of cadence it is. This study aims to investigate such cadential ambiguity shown at points of phrase boundaries by focusing on Chopin's Piano Sonata No. 2 in B-flat minor, Op. 35, first movement. I offer both possibilities (a half cadence or an authentic cadence) at the phrase ending, suggesting a performance-related strategy based on each possibility. My objective is not to support only one cadential status, but to bring up the cadential problem from the analytical perspective and to demonstrate how cadence identification affects performance results.

The dissertation is divided into two parts: analysis and performance, so it relies on a combined method of analytical terminologies and performance-related musical elements. In the analysis, the terminology of William Caplin is employed. The performance part refers to several method books written by prestigious piano pedagogues. After an introduction in Chapter 1, Chapter 2 reviews some literature on cadences. Chapter 3 specifically analyzes the first movement of Chopin's second sonata by means of Caplin's terminologies. Chapter 4 provides a performance-related method and Chapter 5 deals with a practical performance strategy.

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I want to express my sincere gratitude to my parents for their warm support and love. If it had not been for them, I could not have finished this dissertation. They trusted me, inspired me, and motivated me.

Last and most important, I give all glory to God. He did everything. Ever since I started working on this dissertation, even started studying the piano in fact, He has been with me all the time. “The Lord is my strength and my shield; my heart trusts in him, and I am helped. My heart leaps for joy and with my song I praise him.” Psalm 28:7.

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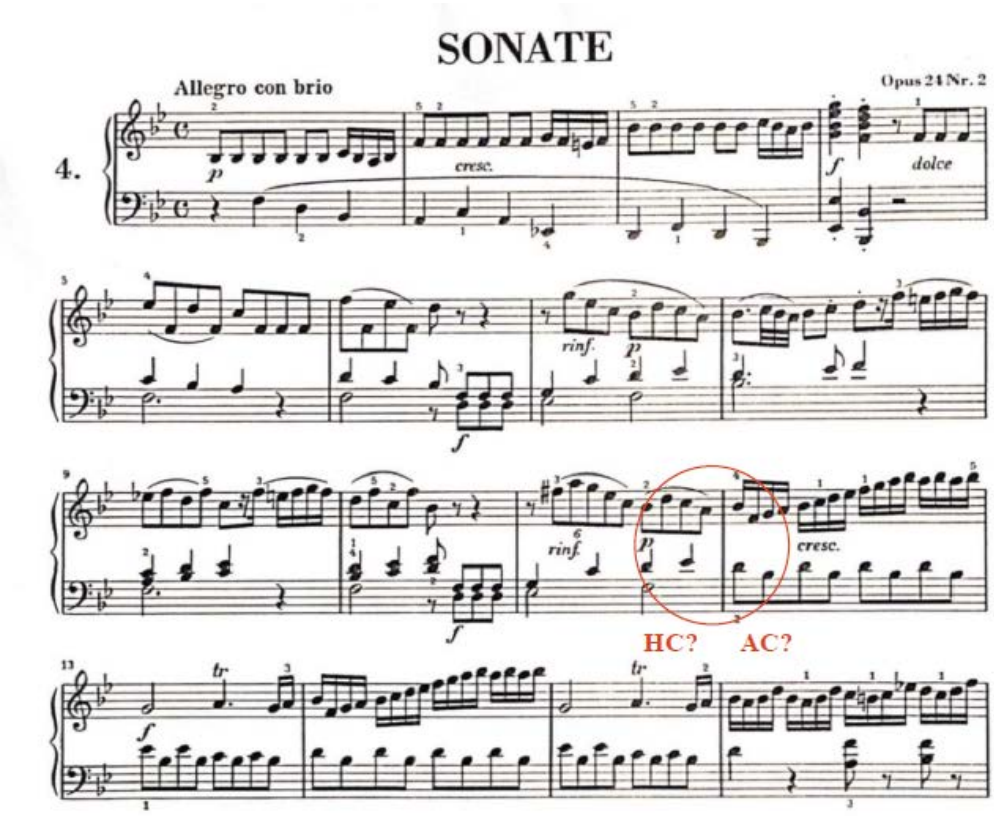
CHAPTER 1

INTRODUCTION

1.1 Purpose of Study

The purpose of this dissertation is to explore cadences from the viewpoints of both analysis and performance. Specifically, I study cases with a dual possibility for cadence identification (authentic or half cadence) and address why this is important for performance. To illustrate, I offer an analysis of the main theme in Muzio Clementi's Piano Sonata in B-flat major, Op. 24 No. 2, first movement, as an introductory example (see Example 1).



Example 1: Two possibilities for a cadence in Clementi's Piano Sonata in B-flat major, Op. 24 No. 2, mm.1-12

In the main theme, the cadence is ambiguous: one could hear the phrase ending with the half cadence (last beat of measure 11) or an authentic cadence (downbeat of measure 12). Given that the meaning of a *cadence* is a genuine ending of a phrase, we should obviously ask how to

conclude the phrase convincingly in performance—where does the main theme actually end? Or in other words, where does the cadence occur? Is it a half cadence in m. 11 or a perfect authentic cadence in m. 12? Such cadential ambiguity often leads to analytical problems as well as challenges in performance-related decisions. When the cadential arrival is ambiguous, the performer needs to take into consideration for their performances.

In this dissertation, I investigate ambiguous cadential points in Chopin's second sonata. My study does not aim to make one-sided performance decisions about ambiguous cadences, because in many cases both possibilities for the phrase ending are plausible. Rather, I bring up the problem of dual possibilities similar to the situation in Clementi's sonata and address the identification of cadences leads to different performance decisions. In all cases, the ambiguity involves the dominant and tonic chords that are next to each other, at the boundary of a phrase. One possibility is to regard the tonic harmony as the phrase ending, and the other possibility is to consider the dominant harmony as closure of the phrase. Since determining the phrase ending is a significant part of performers' works, they need to identify where the real cadence occurs, as well as have some theoretical understanding of this question. Therefore, after giving some background, this study looks at the analytically ambiguous problem from the perspective of the performer in the Second Piano Sonata by Frédéric Chopin (1810-1849).

1.2 Significance and State of Research

The ambiguous-cadence problem discussed above has been investigated recently by several theorists. Many scholars, such as Ann Blombach,[1] Janet Schmalfeldt,[2] and Mark

[1] Ann Blombach, "Phrase and Cadence: A Study of Terminology and Definition," *Journal of Music Theory Pedagogy* 1, no. 2 (1987): 225-51.

[2] Janet Schmalfeldt, "Cadential Processes: The Evaded Cadence and the 'One More Time' Technique," *Journal of Musicological Research* 12, no. 1-2 (1992): 1-52.

Richards,[3] have pointed out the correlation between formal organization and performance, and all three have contributed to the study of cadences from a theoretical viewpoint. One of the most important works has been written by William Caplin, especially his article "The Classical Cadence: Conceptions and Misconceptions."[4] Caplin discusses the concept of the Classical period's cadence in depth, offering a restrictive and precise definition of cadence and striving to redefine the whole concept of cadence.

Caplin's concept of cadence is closely related to his theory of formal functions. Several of his publications deal with the formal organization of Classical works; matters of phrase structure and cadential articulation of form are highly important in this theory. He stresses the significance of cadence identification: "Correctly identifying cadences is one of the most important tasks in formal analysis. Cadences define the principal goals of thematic organization since they are responsible for effecting closure of the fundamental melodic and harmonic processes within themes."[5]

Another important scholar who has investigated these matters is Poundie Burstein, who explores how to interpret certain cadential arrivals in his article—"The Half Cadence and Other Such Slippery Events."[6] In this article, he focuses on conflicting interpretations of cadential labeling between the authentic cadence and the half cadence; his approach has a significant impact on my research. He argues that "because so many issues concerning large-scale formal

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[3] Mark Richards, "Closure in Classical Themes: The Role of Melody and Texture in Cadences, Closural Function, and the Separated Cadence," *Canadian Journal of Music* 31, no. 1 (2010): 25-45.

[4] William E. Caplin, "The Classical Cadence: Conceptions and Misconceptions," *Journal of the American Musicological Society* 57, no. 1 (2004): 51-118.

[5] William E. Caplin, *Analyzing Classical Form: An Approach for the Classroom* (New York: Oxford University Press, 2013), 55.

[6] Poundie Burstein, "The Half Cadence and Other Such Slippery Events," *Music Theory Spectrum* 36, no. 2 (Fall 2014).

and tonal structure depend on how cadences are interpreted, such discrepancies of cadential labeling often lead to larger analytic disputes that reach into the deepest levels of the composition."[7] He further notes that "contrasting cadential readings encourage slightly differing renditions in performance."[8] He analyzes in detail the nature of the half cadence and deals with various elements, such as a slur, voice-leading and phrase syntax, that create a cadential effect on a dominant harmony.

As we have seen so far, the problem of cadential analysis has been explored by theorists; performers have examined the problem of ambiguous cadences to a much lesser extent. A number of doctoral dissertations have been written by performers about formal structure, but they rarely pursued the connection between a theory-based idea and an actual performance. The only exception I have found is Joseph L. Dechario's dissertation (1977), which focuses on phrase structure from the performer's point of view.[9] He engages the concepts of musical syntax, including cadences, but his study is based on atonal music, which is not part of my research. Furthermore, his dissertation is somewhat outdated, since it was written before Caplin's terminology had been formulated. Therefore, the cadence ambiguity should be investigated from the point of view of contemporary performers and music theorists, as a benefit to performers.

The principal contribution of my dissertation is to use Caplin's theory in a study of cadences from the perspective of performers. This project not only explores the analytical issue itself but also relates this issue to specific performance decisions. In doing so, it emphasizes the

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[7] Burstein, "The Half Cadence," 203.

[8] Burstein, 204.

[9] Joseph L. Dechario, "A Phrase Structure Analysis of the Third Movement of Boulez's Second Piano Sonata: An Essay together with a Comprehensive Project in Piano Performance" (DMA diss., University of Iowa, 1977).

reason why pianists should pay attention to cadence identification and, in a larger sense, phrase structure. As a result, my work functions as a practical guideline for performers.

1.3 Analysis-related Methodology: Overview of Caplin's Terminology

To understand the role of cadences in larger formal contexts, we need to have in mind other aspects of form. Below, I offer a summary of Caplin's theory as related to the problems I am engaging in my study. Caplin systematizes formal structures of the Classical instrumental style with regard to formal functions. His terms are presented in several publications, the first being *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven*.[10] In this treatise, he categorizes a variety of theme types that must contain one or more cadences. He mentions that "I begin by illustrating the concept of formal function in connection with the three most important theme-types of classical instrumental music - the sentence, the period, and the small ternary."[11] As I mentioned in section 1.2, the analysis part of this dissertation is dependent on Caplin's terminology. Therefore, in this chapter I briefly describe his terminology which will be discussed when analyzing musical examples.

1.3.1 Two of the Basic Theme-types: the Sentence and the Period

Caplin discusses a variety of theme types including the sentence, the period, the hybrids, and the small ternary and binary. However, I focus on only two of these types which will be illustrated in musical examples: the sentence and the period. Both are derived from types that Arnold Schoenberg had previously formulated.

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[10] William E. Caplin, *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven* (New York: Oxford University Press, 1998).

[11] Caplin, *Classical Form: A Theory of Formal Functions*, 9.

The first basic theme-type is the sentence. It consists of two phrases that are usually four measures respectively: a *presentation phrase* and a *continuation phrase*. The presentation phrase is divided into two short units: a 2-measure *basic idea* and a 2-measure repetition of the basic idea. The continuation phrase, like the presentation phrase, is made up of two units: it begins with a *continuation* (which normally includes some degree of phrase-structural fragmentation[12]), but must ends with a unit of *cadential idea*. In the presentation phrase of the sentence, "we do not have the impression that thematic closure (or 'cadence') has been achieved."[13] A cadence occurs only in the continuation phrase; as a result, the sentence includes only one cadence.

The second fundamental theme type, the period, is also made up of two phrases: an *antecedent phrase* and a *consequent phrase*. However, unlike the sentence, the period contains two cadences, since each phrase ends with a cadence. The antecedent begins with a *basic idea*, just as the presentation phrase does, but is followed by a *contrasting idea*, instead of a repetition of the basic idea. "The notion of a 'contrasting' idea must be understood in the sense of its being 'not-a-repetition.'"[14] The antecedent ends with a cadence. In the consequent phrase, the basic idea presented in the antecedent phrase comes back, and then "leads to a contrasting idea, which may or may not be based on that of the antecedent … More important, of course, the contrasting idea must end with a cadence stronger than the one closing the antecedent, usually a perfect authentic cadence."[15]

Caplin also recognizes situations where sentential and periodic features are combined in the same theme; he calls these forms *hybrids*. Like sentences or periods, hybrid themes are 8-

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[12] A process of shortening in the length of units in relation to the previous grouping structure. For example, four-measure unit size (established in the presentation) is shortened to two-measure unit size. Refer to Caplin, 41.

[13] Caplin, 10.

[14] Caplin, 12.

[15] Caplin, 12.

measure units that consist of two phrases. There are four types of hybrid. The first hybrid theme is a combination of antecedent and continuation. The second begins with antecedent followed by continuation $\Rightarrow$ cadential (the meaning of $\Rightarrow$ is "becomes"). The third includes a compound basic idea and continuation. The last is made up of a compound basic idea and consequent.

1.3.2 Cadential Extension

My discussion above summarizes basic theme types in their purest, simplest form. However, in actual musical situations, sentential and periodic structures are often modified to contain expansions, extension, or compressions. Extension technique relates directly to the issue of cadences, since it is primarily cadential deviations that produce extended forms. At the same time, cadential deviations are also fundamentally important for performance, since the performer should have some awareness of how and why the phrase receives its shape. Caplin defines a failure to cadence, which leads to an extended phrase, as a *cadential extension*:

> Most cadential extensions occur when a promised perfect authentic cadence fails to materialize, thus motivating the appearance of one or more cadential units to make the requisite closure. The expected perfect authentic cadence can remain unfulfilled when in its place, the composer writes an imperfect authentic cadence, a deceptive cadence, an evaded cadence, or an abandoned cadence.[16]

A *deceptive cadence* occurs "if the arrival point of that substitute harmony truly groups with the preceding material and thus represents its melodic and harmonic goal."[17] The deceptive cadence "produces a very unstable feeling and would never be used to end a tonal work."[18] An *evaded cadence* is

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[16] Caplin, 101.

[17] Caplin, 101.

[18] Stefan Kostka and Dorothy Payne, *Tonal Harmony: With an Introduction to Twentieth-Century Music* (New York: McGraw-Hill, 2004), 149.

> the most common way of extending cadential function in a subordinate theme … The musical event that directly follows the cadential dominant is perceived to group with subsequent material, not with the material leading up to that dominant … In most evaded cadences, the cadential dominant moves to I^6, which is appropriate because the inverted form of the tonic prohibits the listener from construing a true cadence at that point.[19]

To put it another way, the evaded cadence is a failure to reach the I chord. "The tonic is effectively eliminated (the harmony following the dominant, say, I^6, does not really belong to the prevailing cadential progression but instead introduces a new progression)."[20] An *abandoned cadence* is a way of "altering, or even eliminating, the cadential dominant itself … The composer initiates what seems to be a cadential progression but then 'abandons' the progression by either inverting the cadential dominant or allowing the progression to bypass that dominant entirely."[21] An *elided cadence* is a moment where the end of one theme and the beginning of the following occur at the same time. "More precisely, the final tonic of the perfect authentic cadence functions simultaneously as the initial tonic of the subsequent theme."[22]

One other aspect of organization needs to be addressed: the concept of looser formal structures. Caplin's term "loose" is derived from Schoenberg's term *locker* (in German) forms; the opposition of tight-knit versus loose refers to structural stability versus instability. Looser formal regions include the transition and the development (and often the subordinate theme) of sonata movements. These regions have less prescribed structure than sentences and periods are generally less predictable. Extended forms are, by definition, looser than their symmetrical prototypes (such as 4+4 sentences and periods).

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[19] Caplin, 101.

[20] Caplin, 106.

[21] Caplin, 107.

[22] Caplin, 121.

1.4 Performance-related Methodology

In Chapter 5, I offer a detailed performance guide to the first movement of Chopin's Sonata No. 2 in B-flat minor, Op. 35. Since my research will essentially contribute to interpretation of performance on the basis of theoretical understanding, a combined method of analytical terminologies, discussed above, and musical elements are indispensable. In order to discuss musical elements, I rely on several pedagogical books. A great number of legendary piano pedagogues have addressed a variety of technical issues in piano playing. My research mainly benefits from György Sándor who wrote one of the most influential books dealing with piano technique, *On Piano Playing: Motion, Sound, and Expression*.[23] Chapter 4 offers a detailed description of the performance-related methodology by exploring several method books. Below is a list of pedagogy books used in the performance-related chapters (see Table 1).

Table 1: A list of pedagogy books.

Author	Title	Year
Arthur Foote	*Some Practical Things in Piano Playing*	1909
Beryl Rubinstein	*Outline of Piano Pedagogy: A Series of Papers Setting Forth the Aims and Objectives of Piano Instruction with Suggestions for Solving Manifold Problems Confronting the Serious Teacher*	1947
Hermann Keller	*Phrasing and Articulation: A Contribution to a Rhetoric of Music, with 152 Musical Examples*	1965
Howard Ferguson	*Keyboard Interpretation from the 14th to the 19th century: An Introduction*	1975
Josef Hofmann	*Piano Playing: With Piano Questions Answered*	1976
Kendall Taylor	*Principles of Piano Technique and Interpretation*	1981
György Sándor	*On Piano Playing: Motion, Sound, and Expression*	1981
Donald Barra	*The Dynamic Performance: A Performer's Guide to Musical Expression and Interpretation*	1983
Richard Collins	*Piano Playing: A Positive Approach*	1986
Malwine Brée	*The Leschetizky Method: A Guide to Fine and Correct Piano Playing*	1997
Silvio Scionti	*Essays on Artistic Piano Playing and Other Topics*	1998

[23] György Sándor, *On Piano Playing: Motion, Sound, and Expression* (New York: Schirmer Books, 1981).

Although the books serve as resources on performance aspects, they mostly approach piano performance on the basis of technical and physical issues, rarely paying attention to theoretical understanding in discussing performing or practicing. I would not accuse these methods of being impractical, but a performer conscious of their structural decisions needs an analytical understanding of music. This is why, in addition to using typical methods from pianists mentioned above, I also use William Newman's book, *The Pianist's Problem: A Modern Approach to Efficient Practice and Musicianly Performance* as an essential source. Newman explores in depth various problems that pianists confront and proposes solutions in relation to pianistic mechanism. He also discusses the concept of the phrase in relation to performance, since interpretation of the phrase considerably affects the rendition of a musical work.

Regarding musical examples from Chopin's Sonata, I rely on primarily the edition by Jan Ekier as the most authoritative edition. "Jan Ekier was editor-in-chief of the Polish National Edition of the works of Fryderyk Chopin, the aim of which was to publish Chopin's musical texts cleansed of historical editorial accretions, based solely on the brilliant composer's autographs."[24] According to William Smialek and Maja Trochimczyk, authors of *Frédéric Chopin : A Research and Information Guide,* Ekier's edition is "based on manuscripts, copies, *Stichvorlage,* first editions with Chopin's corrections, and students' copies with handwritten notes."[25] Moreover, in order to verify this edition's reliability, Appendix A is a *Stichvorlage* engraved by Adolf Gutmann,[26] who was "the main copyist of Chopin's works. There are nine

[24] "Persons Related to Chopin: Jan Ekier," Internet Chopin Information Centre, The Fryderyk Chopin Institute, accessed July 31, 2019, https://en.chopin.nifc.pl/chopin/persons/detail/id/276.

[25] William Smialek and Maja Trochimczyk. *Frédéric Chopin: A Research and Information Guide* (New York: Routledge, Taylor & Francis Group, 2015), 162.

[26] *Stichvorlage* copies are manuscripts, page proofs, and other documents used in preparing works for publication. See Smialek and Trochimczyk, *Frédéric Chopin: A Research and Information Guide* (New York: Routledge, Taylor & Francis Group, 2015), 145-146.

copies of Chopin's compositions took by Gutmann: the six Etudes Op. 25, Sonata in B minor Op. 35, Ballade in F major Op. 38 and Scherzo in C minor Op. 39."[27] Although the manuscript was not written by Chopin, "it has corrections in Chopin's hand. A facsimile of the first page is printed in the notorious 'Paderewski' edition."[28]

[27] "Persons Related to Chopin: Adolf Gutmann," Internet Chopin Information Centre, The Fryderyk Chopin Institute, accessed Oct 3, 2019, https://en.chopin.nifc.pl/chopin/persons/detail/name/Gutman/id/6333.

[28] Charles Rosen, "The First Movement of Chopin's Sonata in B♭ Minor, Op. 35," *19th-Century Music* 14, no. 1 (Summer 1990): 60.

CHAPTER 2

LITERATURE REVIEW ON CADENCES

2.1 What is a Cadence?

The term "cadence" originates from the Latin verb *cadere*, "to fall." According to *Grove Music Online*, a *cadence* is "the conclusion to a phrase, movement or piece based on a recognizable melodic formula, harmonic progression or dissonance resolution; the formula on which such a conclusion is based."[29] Many theorists agree that a cadence is a method to end a phrase. Steven G. Laitz and Christopher Bartlette define cadence as "a point of arrival (on I or V) that usually occurs at the end of a phrase."[30] Ann Blombach also states that "a cadence is any musical element or combination of musical elements, including silence that indicates relative relaxation or relative conclusion in music."[31]

These statements are typical notions of the cadence. William E. Caplin, however, has sought to reassess the notion of cadence and to narrow it down: "the definition of cadence and its analytical application should be considerably more restricted than has normally been the case."[32] He supports his stance by quoting Blombach:

> Blombach's broad definition of cadence … appeals fundamentally to the notion of cadence as conclusion, noting that " 'conclusion' is intended in the sense of 'destination of ideas,' as opposed to merely stopping with no indication of finality or direction." In other words, formal "end" and rhythmic/textural "stop" may very well be associated in many cadential situations, but they are fundamentally different phenomena, both conceptually and experientially.[33]

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[29] Grove Music Online, s.v. "Cadence," by William S. Rockstro, George Dyson, William Drabkin, Harold S. Powers and Julian Rushton, accessed May 6, 2019. https://libproxy.library.unt.edu:15045/grovemusic/view/10.1093/gmo/9781561592630.001.0001/omo-9781561592630-e-0000004523.

[30] Steven G. Laitz and Christopher Bartlette, *Graduate Review of Tonal Theory: A Recasting of Common-Practice Harmony, Form, and Counterpoint* (New York: Oxford University Press, 2010), 46.

[31] Ann Blombach, "Phrase and Cadence," 231.

[32] Caplin, "The Classical Cadence," 52.

[33] Caplin, 97.

Caplin adjusts the definition of the cadence as is traditionally understood in musical form. "A cadence essentially represents the structural end of broader harmonic, melodic, and phrase-structural processes"[34]; "a cadence closes a theme and, in many cases, a component part of a theme."[35] His argument is that "cadence creates musical closure, but not all closure in music is cadential. Closure in general involves bringing to completion some process implicating one or more modes of musical organization at a given structural level of a work."[36] Although harmonic, melodic, or rhythmic processes are closed, they do not create cadence: "the various types of closure associated with individual musical parameters are, in themselves, insufficient to create cadence unless a sense of *formal* closure is present as well."[37] To put his ideas succinctly, a cadence is not "stop" but "end." Caplin's definition of a cadence synthesizes concepts of harmony, melody, and phrase structure, unlike those of previous theorists who usually rely on only some of these aspects.

2.2 Types of Cadences

Cadences are supported by different kinds of chord progressions. According to *Grove*,

> In music of the tonal periods (Baroque, Classical and Romantic), it is useful to distinguish between cadences on the basis of their varying degrees of 'finality', for example between those whose final chord is on the tonic and those whose final chord is on some other degree of the scale, between those whose chords are all in root position and those which contain at least on inverted chord, and so on.[38]

Cadences have been categorized by the chord progression: authentic cadence, half cadence, deceptive cadence, and plagal cadence, etc. From Caplin's point of view, only two cadences—

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[34] Caplin, *Classical Form: A Theory of Formal Functions*, 43.

[35] Caplin, "The Classical Cadence," 58.

[36] William E. Caplin, 56.

[37] William E. Caplin, 57.

[38] *Grove Music Online*, s.v. "Cadence."

authentic and half—may be regarded as genuine cadences: "cadences are classified into two main types based on the final harmony of the underlying cadential progression. If the goal of the progression is tonic, an *authentic cadence* is created; if the harmonic goal is dominant, a *half cadence (HC)* is created."[39] "Cadences that close V-I (dominant to tonic in root position) are called authentic cadences and are labeled AC. Those that close on a root-position dominant are called half cadences and are labeled HC."[40] These two main cadences will be discussed in the following sections.

2.2.1 The Half Cadence

Caplin writes that "the half cadence (HC) is a very common type of unstable or 'progressive' cadence. The HC ends with a V chord, which can be preceded by any other chord."[41] "The dominant frequently follows a six-four chord with the same bass note, the so-called cadential tonic six-four. … The half cadence is frequently encountered at the conclusion of the first part of shorter pieces in binary form."[42]

2.2.2 The Authentic Cadence

"One very important type of cadence consists of a tonic triad … This kind of cadence is called an authentic cadence."[43] In Caplin's classification,

> authentic cadences are further subdivided according to the extent of melodic closure achieved at the cadential arrival. In a perfect authentic cadence (PAC), the melody reaches the tonic scale-degree in conjunction with the onset of the final tonic harmony. In

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[39] Caplin, *Classical Form: A Theory of Formal Functions*, 43.

[40] Laitz and Bartlette, *Graduate Review of Tonal Theory*, 46.

[41] Kostka and Payne, *Tonal Harmony*, 149.

[42] Don Michael Randel, ed., *The New Harvard Dictionary of Music* (Cambridge, MA: Harvard University Press, 1986), 121.

[43] Kostka and Payne, 147.

an imperfect authentic cadence (IAC), the melody is left open on the third scale-degree (or, very rarely, the fifth degree).[44]

2.2.3 Other Types of Cadences

Besides the two cadences discussed above, I would like to shortly discuss two less common types: a plagal cadence and a Phrygian half-cadence. "A plagal cadence (PC) typically involves a IV-I progression. Although plagal cadences are usually final sounding, they are not as important in tonal music as the authentic cadence."[45] This position is supported by Edward Aldwell, et al.: "because motion between IV and I lacks the key-defining power of the V-I progression, plagal cadences have a much more limited function than do authentic (V-I) cadences."[46] The plagal cadence "is usually added on as a kind of tag following a PAC. A familiar example of this is the 'Amen' sung at the end of hymns."[47]

A Phrygian cadence "is one in which the root of the final chord is approached from a semitone above, most often in the form IV6-V in minor. … It is a characteristic gesture of Baroque music and often concludes a slow movement that is to be followed immediately by a faster one."[48] "The name refers to a cadence found in the period of modal polyphony (before 1600), but it does not imply that the music is actually in the Phrygian mode."[49]

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[44] Caplin, 43.

[45] Kostka and Payne, 150.

[46] Edward Aldwell, Carl Schachter, and Allen Cadwallader, *Harmony & Voice Leading* (Boston: Schirmer/Cengage Learning, 2011), 231.

[47] Kostka and Payne, 150.

[48] Don Michael Randel, ed., *The New Harvard Dictionary of Music*, 121.

[49] Kostka and Payne, 150.

CHAPTER 3

A SPECIFIC EXAMPLE OF CADENTIAL AMBIGUITY

William Rothstein addresses the importance of the performer's participation in analyzing a musical work:

> It is the performer who controls the way in which virtually every aspect of the work is conveyed to the listener. Which features of the music are 'brought out', which are concealed, which are allowed to speak for themselves - these are only some of the decisions the performer must make. Determining what those features are is the task of analysis - analysis which is best carried out through a combination of intuition, experience and reason.[50]

3.1 Chopin's Piano Sonata in B-flat minor, Op. 35, First Movement

This section discusses the first movement of Chopin's Sonata in B-flat minor, focusing on cadence-related analytical issues, as discussed in the previous chapter. Specifically, it concentrates on the first cadence of the subordinate theme, mm. 56-57. However, to understand the role of this cadence, one needs first to address the larger-scale form of the movement. Therefore, we must first consider the structure of the exposition, to contextualize the behavior of the subordinate theme.

3.2 Overview of the Exposition

This movement is written in sonata form, containing exposition, development, and recapitulation. Unusually, the exposition is preceded by both a *slow introduction* and a *thematic introduction*. The opening four measures, marked *Grave*, constitute a slow introduction, and the following four measures (mm. 5-8) are a thematic introduction. Caplin defines the difference between these two functions in this way:

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[50] William Rothstein, "Analysis and the Act of Performance," in *The Practice of Performance: Studies in Musical Interpretation,* ed. John Rink (Cambridge: Cambridge University Press, 1995), 237.

> Even though both express the formal function of before-the-beginning … a slow introduction differs from a thematic introduction with respect to both its location in the movement's structural hierarchy and the complexity of its formal organization … A thematic introduction resides on a hierarchical level comparable to that of a basic idea, contrasting idea cadential idea, and codetta … conversely, a slow introduction resides on a level comparable to that of an exposition, development, recapitulation, and coda.[51]

Another difference between them is that whereas the slow introduction does not belong to the main theme, the thematic introduction is part of the main theme. In addition, unlike the slow introduction, which tends to explore chord progressions, the thematic introduction normally contains tonic prolongations.

The following discussion lists the boundaries of the thematic units in the exposition. According to Caplin, the term *theme* refers to "a complete formal unit, which includes its particular melodic-motivic content, its accompanimental texture, and its supporting harmonic progressions."[52] The exposition of Chopin second sonata consists of four theme-types: main theme (mm. 5-24), transition (mm. 25-39), subordinate theme (41-81), and closing section (mm. 81-103). These are all standards of thematic functions. The keys and cadences along with measure numbers of each theme-type are presented in Table 2.

Table 2: The four theme-types of exposition of Chopin, Piano Sonata in B-flat minor, Op. 35, I

Theme	Measures	Key	Cadence
Main theme	mm. 5-24	B-flat minor	No half cadence
Transition	mm. 25-39	B-flat minor	Half cadence in m. 39
Subordinate theme	mm. 41-81	D-flat major	Authentic cadence in m. 81
Closing section	mm. 81-103	D-flat major	Half cadence in m. 103

After the slow introduction (mm. 1-4), the main theme begins with a thematic introduction (mm. 5-8), followed by a *presentation phrase* (mm. 9-16).

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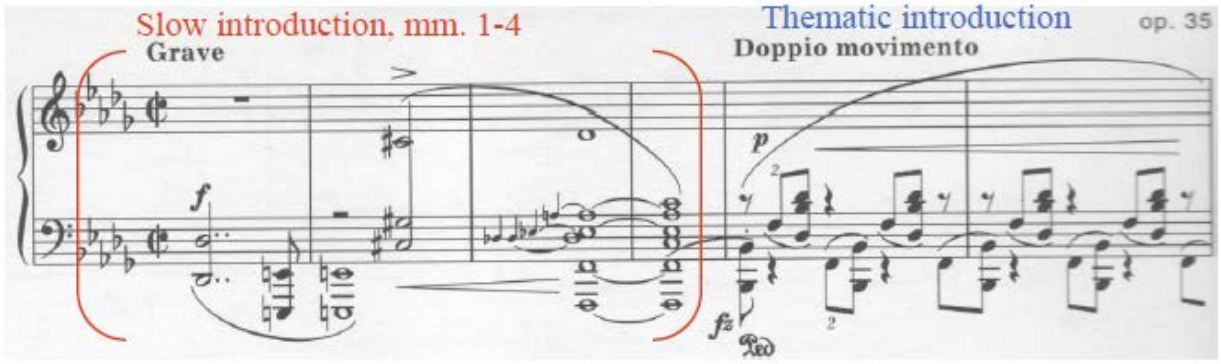
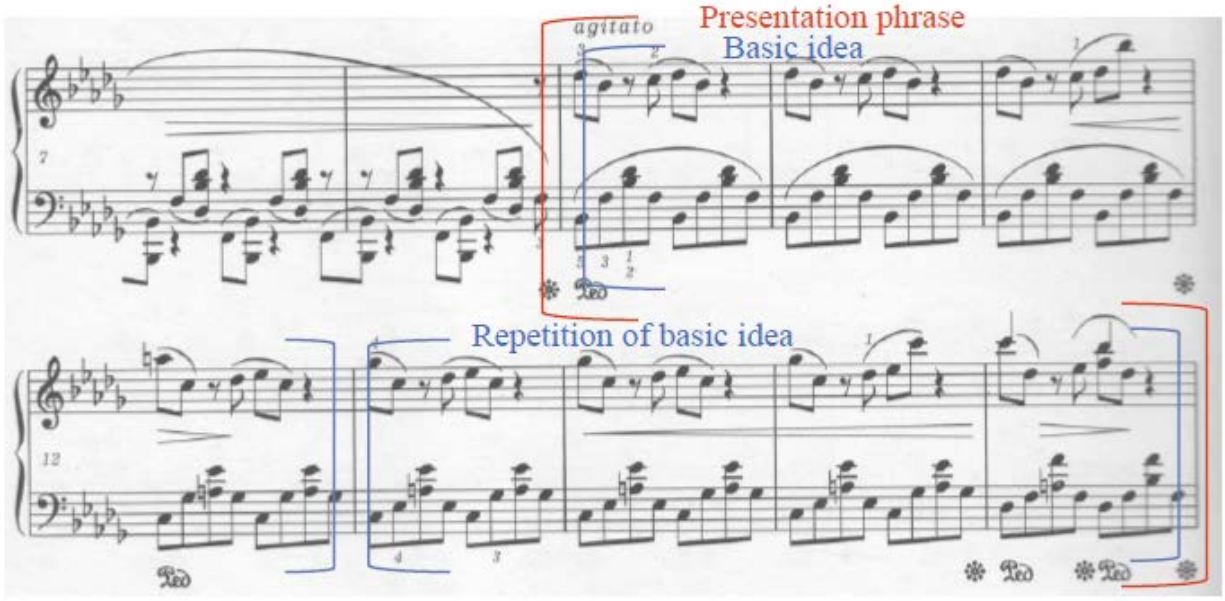
[51] Caplin, *Classical Form: A Theory of Formal Functions*, 203-204.

[52] Caplin, *Analyzing Classical Form*, 33.



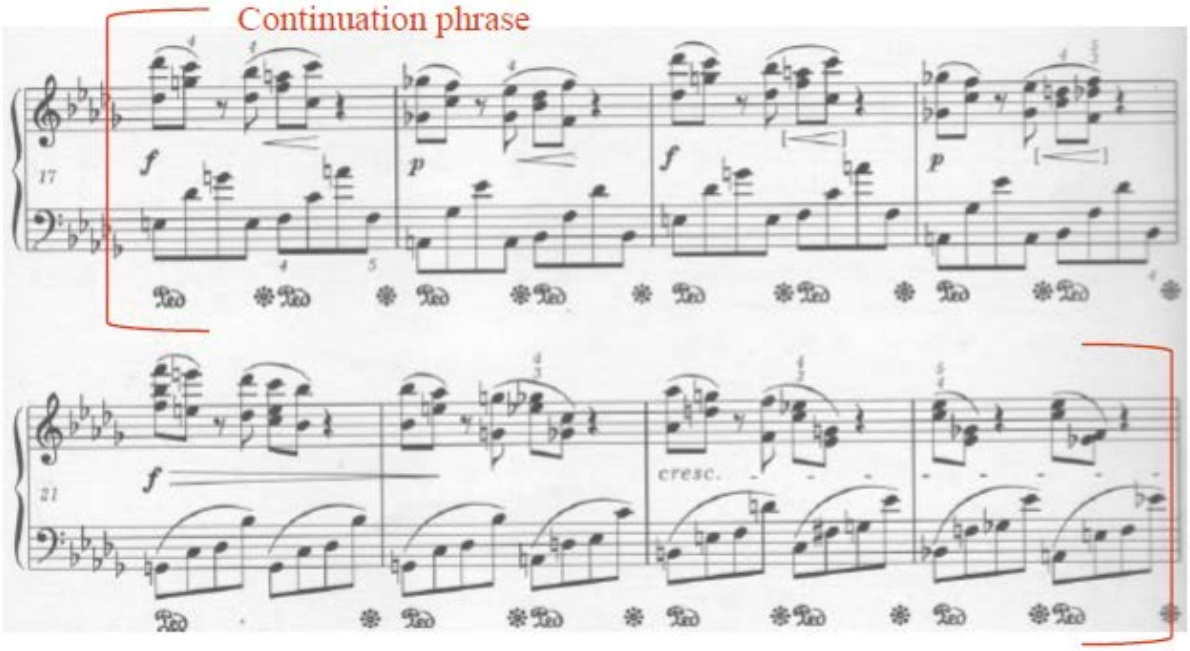
Example 2: Slow introduction in Chopin, Piano Sonata I, mm. 1-4

In the presentation phrase, a 4-measure basic idea is supported by tonic harmony in the key of B-flat minor. The idea is restated with a diminished-seventh chord, which creates a 4-measure repetition of the basic idea. According to Caplin, there are three types of repetitions: exact repetition, statement-response repetition, and sequential repetition. The presentation in this theme belongs to the statement-response type. These eight measures (mm. 9-16) form the presentation phrase. The presentation does not have a cadence because it prolongs the tonic harmony.



Example 3: Presentation phrase of main theme, mm. 9-16

In m. 17, the continuation phrase begins, by maintaining the surface rhythm of the presentation. The continuation displays fragmented 4-measure units of the basic idea. The harmonic rhythm is accelerated because the harmony now changes every half-measure. The fragments becomes even shorter, one measure long, starting in m. 21, which is followed by a sequence in mm. 22-23. A cadential progression begins in m. 24.



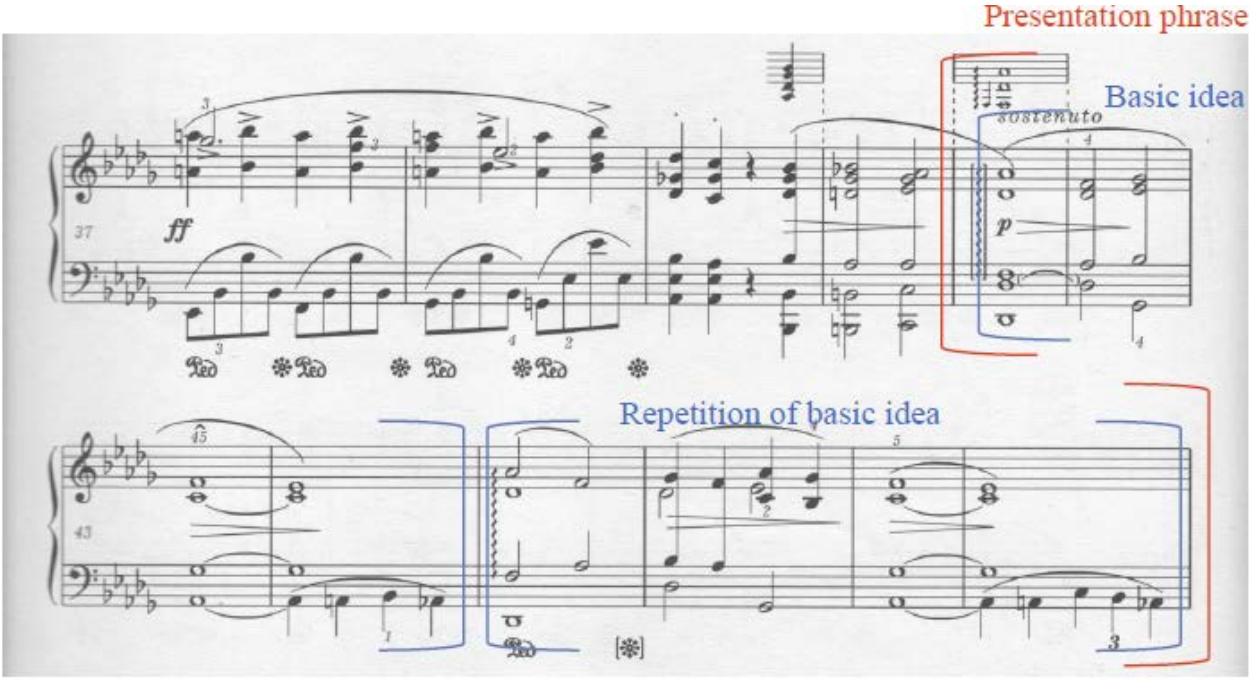
Example 4: Continuation phrase of main theme, mm. 17-24

The presentation and the continuation combine together to form a sentence. One might be inclined to determine the dominant harmony (m. 24) as a cadential point, leading to a 16-measure sentence (mm. 9-24). In fact the sentence concludes in m. 25, where an elided cadence occurs, and thus the entire theme represents a sentence of 17 measures (mm. 9-25). This cadence will be discussed in detail in section 3.1.2.

In m. 25, the transition starts, still in B-flat minor, with a return of the main theme's presentation with a slightly different left hand figuration. The melodic-motivic material presented in the main theme is restated until m. 32. The continuation phrase of the transition modulates in m. 36 to the subordinate key of D-flat major, closing with a HC of D-flat major in

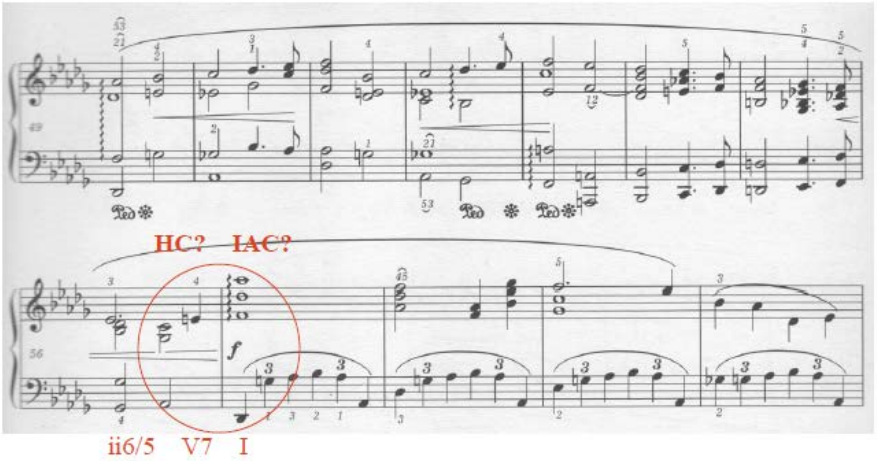
m. 39. One might misconceive m. 40 as a HC, but due to the inverted dominant chord, m. 40 cannot constitute cadential closure. A similar issue to the inverted V chord happens in m. 24, which will be dealt with in section 3.1.2. The progression from the last beat of m. 39 to m. 40 serves as a lead-in to the subordinate theme in D-flat major, which occupies mm. 41-81.

The subordinate theme is a compound period that consists of two sentences, mm. 41-56 and 57-81 (that is, both the antecedent and the consequent are sentences, made up of a presentation phrase and a continuation phrase). A subordinate theme chart may be found in Appendix B. A new 4-measure idea arrives as the basic idea in mm. 41-44.



Example 5: Subordinate theme: presentation phrase of the antecedent, mm. 41-48

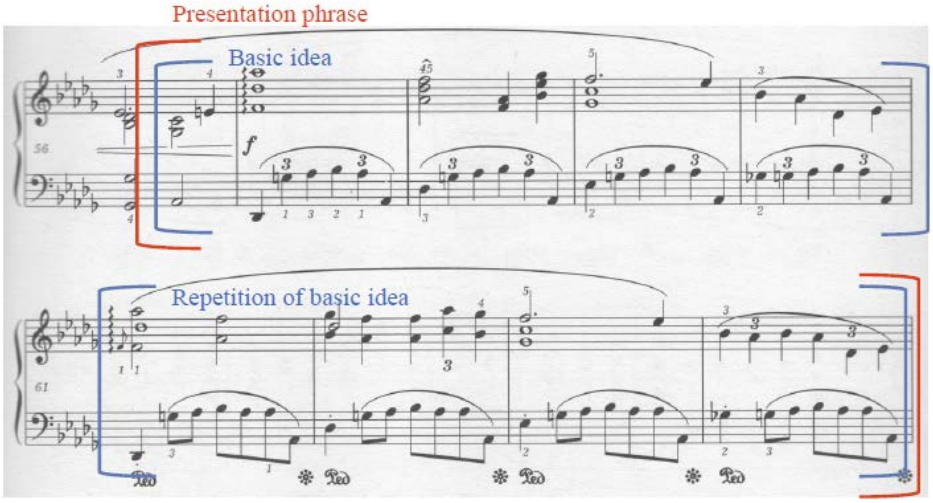
In mm. 45-48, the basic idea returns by exact harmonic repetition with somewhat varied melody. These two ideas form the 8-measure presentation phrase (mm. 41-48). After the presentation, the continuation within the sentential antecedent begins in m. 49 and lasts until m. 56 or m. 57, depending on how we interpret the cadential ambiguity of the phrase ending (see Example 6).



Example 6: Subordinate theme: a cadential ambiguity, mm. 56-57

Here, it is ambiguous where the continuation phrase ends because the cadential ambiguity happens between m. 56 and m. 57. One might think that a cadence appears on the dominant-seventh chord in m. 56. On the other hand, one could argue that the ending of the continuation happens at the downbeat of m. 57 with the tonic harmony. This dual analytic possibility will be specifically discussed in section 3.1.3.

The presentation from the antecedent returns in m. 57 an octave higher in the right hand as well as a much more animated texture in the left hand, creating another formal function, the 8-measure presentation (mm. 57-64) from the consequent phrase (mm. 57-81). The presentation of the consequent opens with a varied return of the basic idea and ends in m. 64.



Example 7: Subordinate theme: presentation phrase of the antecedent, mm. 57-64

The continuation within the consequent is expanded in relation to the continuation in the antecedent, resulting in asymmetric grouping structure of the period (mm. 65-81).

Example 8: Subordinate theme: beginning of expansion from consequent in m. 69

This expanded phrase is not unusual in the period. Caplin points out that "the antecedent usually retains its conventional size …, but the consequent is often expanded in order to create a looser organization."[53] Even a phrase expansion is a typical phenomenon in Chopin's music, as explained by Charles Burkhart:

> There is, I submit, one type of expansion that Chopin does write so frequently that it calls for special mention … Such an expansion nearly always embodies an important - often the main - climax of the piece. Newcomers to the idea of expansion must understand that there are many kinds of expansion and that as a general phenomenon it can occur anywhere in a composition. I am discussing here just one very specific manifestation of it dubbing it "concluding expansion," and showing it only in the music of Chopin, who wrote this kind of expansion so often that it may be considered an element of his style.[54]

The cadential phrase of the expanded continuation begins in m. 75, and finally the consequent ends with a PAC, conveying a strong sense of arrival in m. 81.

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[53] Caplin, 395.

[54] Charles Burkhart, "Chopin's "Concluding Expansions"," in *Nineteenth-Century Piano Music: Essays in Performance and Analysis*, ed. David Witten (New York: Garland Publishing, 1997), 97.

After the subordinate theme receives closure, a lengthy closing section follows, consisting of multiple codettas. The closing section begins in m. 81 with a 4-measure. codetta. The second codetta immediately follows with similar melodic-motivic material (mm. 85-89). Each codetta occupies four measures, except for the last, longer codetta. The closing section ends with the arrival of dominant harmony in m. 103 in the key of D-flat major.

3.3 An Elided Cadence

As pointed out above, the main theme, in the form of a sentence, ends with an elided cadence in m. 25. Before discussing the elided cadence, we need to look at why we cannot call the dominant harmony in m. 24 a half cadence. One can mistakenly analyze the sentence as closing with a half cadence simply because of the dominant in m. 24. However, the dominant cannot be a cadence, since it is inverted (V 6/5). Caplin does not regard the inverted chord as cadential closure, instead, calling it "a dominant arrival." In his treatise, he supports his claim: "the dominant would then be too unstable to function as a cadential goal. In such cases, the formal articulation created by this final harmony can be labeled a dominant arrival, in contrast to a genuine half cadence."[55] We further take a look at Burstein's comments on this issue:

> It has been argued that the appearance of an inverted V or V7 at the onset of a phrase ending *automatically* rules out the possibility of a half cadence, regardless of the melodic, rhythmic, and formal features that otherwise might support such a reading. Lately this stance has become increasingly prevalent, to the extent that the notion that an inverted V or V6 cannot establish a cadence has become a standard feature of much modern music analytic discourse and pedagogy.[56]

If we take this point of view, the closure of the sentence happens in m. 25 with an IAC instead of the HC in m. 24. At the same time, m. 25 is the beginning of the transition. In other words, m. 25

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[55] Caplin, *Classical Form*, 79.

[56] Burstein, 211-212.

is a special moment where the closing of the preceding theme and the opening of the following theme occur simultaneously; this overlapping thematic boundary is called an elided cadence. Elision happens "when the end of one formal unit directly coincides with the beginning of the subsequent unit, then we term this boundary process elision."[57]

3.4 An Ambiguous Point of Phrase Boundary

As mentioned above, cadential ambiguity occurs in mm. 56-57 which constitute the endpoint of the antecedent phrase within the subordinate theme. The dominant and tonic chords are alongside each other at the point of phrase boundary. I now address the specifics of the choice for performers. Does the antecedent end with a half cadence in m. 56 or an imperfect authentic cadence in m. 57? One might initially be tempted to rely on the phrasing slur that encompasses mm. 49-59. However, we need to take a cautious attitude because, in some cases, not all such slurs are marked by composers themselves: some might be added by editors. This being so, slurs do not always indicate cadential points. Needless to say, we can never rely on them as indicators of cadence. Chopin's slurs are especially confusing. According to Rothstein, "his slurs are an analytical minefield. No composer so frequently slurred against the phrase structure of his music rather than in support of that structure."[58] For this reason, cadential status instead depends on various factors such as harmonic, melodic, or phrase-structural processes. Hence, I consider all of them when discussing a determinant of cadential status for both possibilities in Chopin's Sonata.

Those who take a stance in favor of HC in m. 56 would argue that the antecedent closes on the dominant in m. 56. Which elements promote a sense of HC? I would first mention that a

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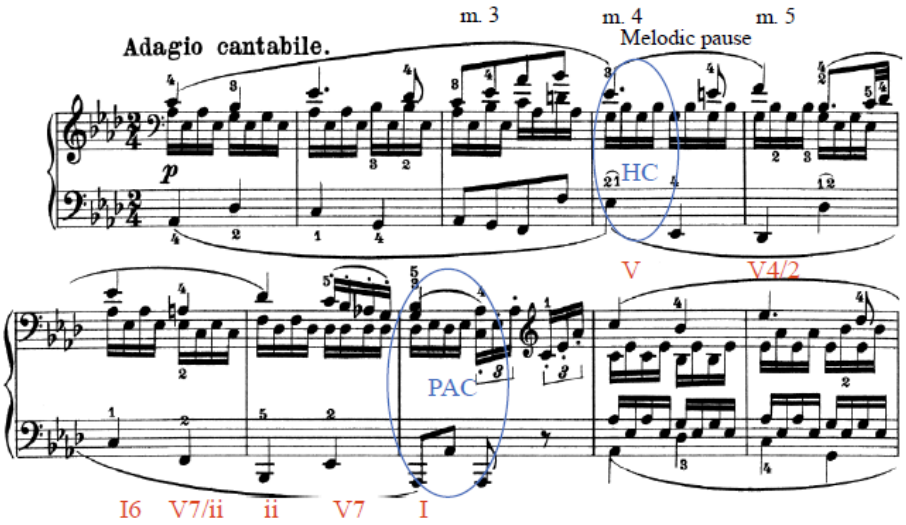
[57] Caplin, *Analyzing Classical Form*, 86.

[58] William Rothstein, *Phrase Rhythm in Tonal Music* (New York: Schirmer Books, 1989), 220.

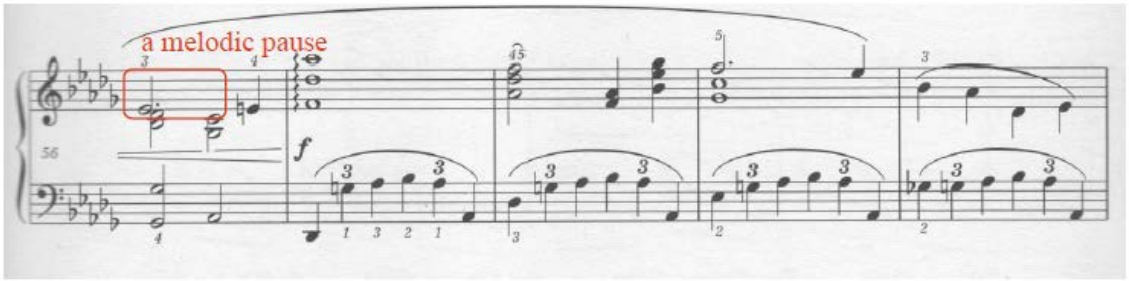
brief melodic pause in m. 56 supports the assertion that a half cadence occurs at the moment. Burstein explores a similar issue in Beethoven's *Pathétique* Sonata, second movement. The following paragraph and example are excerpted from his article ("Example 7" indicates the example number in his article, not in this dissertation).

> Consider the passage in Example 7. This theme is often cited as a classic example of a contrasting period, in which a forephrase (mm. 1-4) ends with a half cadence that is answered by an afterphrase (mm. 5-8). The notion that a half cadence arises in m. 4 is supported by the hypermeter, the momentary melodic pause in m. 4, and the rhythmic drive in m. 3 that leads to the root-position V in the next measure.[59]



Example 9: (Corresponding to Example 7 in Burstein's article). Beethoven, Sonata for Piano in C Minor, Op. 13 ("Pathétique"), second movement, mm. 1-8

In Chopin's example, although I have referred to "a brief melodic pause," the pause is in fact the longest rhythmic value in the continuation of the antecedent.



Example 10: A melodic pause in m. 56

[59] Burstein, 208.

Accordingly, the pause can create an impression of phrase ending. From this point of view, the last beat of m. 56 (E ♮) is a *lead-in*. The term "lead-in," introduced by William Rothstein, "is a melodic unit less complete (and usually shorter) than the phrases which it connects. It is not a subphrase, however, because it is not part of any complete phrase but merely a link between two such phrases."[60] Caplin describes how "the lead-in functions largely to generate rhythmic continuity and flow from one phrase to the next."[61] Accordingly, if m. 56 is a half cadence, the E ♮ leads to the onset of the next phrase.

Moreover, a temporal pause happens between m. 56 and m. 57, which disrupts the continuation from the antecedent from lasting until m. 57. The arpeggio sign in m. 57 separates the E ♮ from the F. *Grove Music Online* defines how *arpeggio* is "the sounding of the notes of a chord in succession rather than simultaneously; also, especially in keyboard music, the breaking or spreading of a chord."[62] I would like to focus on "in succession" which is the essential feature of arpeggio patterns. Considering the nature of the arpeggio sign, it is irrational to stop during the arpeggio. In Chopin's example, "in succession" means that the A-flat comes almost at the same time (not the exact same time) as the F. To play the arpeggio, the fingers have to be spread out. The separation between m. 56 and m. 57 makes it easier to play the arpeggio "in succession." Consequently, a temporal pause necessarily happens before the arrival of the F in order to play the arpeggio with a succession.

The second possibility, an IAC, would require that the V resolves to the I on the

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[60] William Rothstein, *Phrase Rhythm in Tonal Music*, 51.

[61] Caplin, 86.

[62] Grove Music Online, s.v. "Arpeggio," accessed August 4, 2019, https://libproxy.library.unt.edu:2147/10.1093/gmo/9781561592630.article.01327.

downbeat of m. 57. In regard to harmonic elements, it is hard to disconnect the V from the I. This is supported by Burstein dealing with the similar issue discussed above (see Example 9). He argues that "since it is so strongly linked to an ensuing passage that seems much like what typically is found midphrase, this in turn suggests that the V in m. 4 might likewise be best interpreted as lying midphrase."[63] Also, in Chopin's example, an impression of closure on the V is undermined by the crescendo toward the downbeat of m. 57. It is evident that this crescendo toward m. 57 proves the composer's intention not to lose momentum during it. The composer did not want to separate the passage until the authentic cadence—from the point of view of IAC—closes the antecedent. If it were a HC, the crescendo would stop on the dominant. It should be added that the HC in m. 56 includes a V7 chord, which, according to Caplin's eighteenth-century-based theory, cannot participate in a HC, but this is permitted according to Janet Schmalfeldt, who calls such a situation "the nineteenth-century half cadence."

Those who take a stance in favor of IAC need to bear two things in mind. One is that the antecedent is 17-measure long, resulting in an asymmetrical antecedent (8-measure presentation function plus 9-measure continuation function). Another is that the tonic (m. 57) simultaneously functions as both closing chord of the antecedent and opening of the following consequent phrase, which is an elided cadence; this cadence is already discussed above (see 3.1.2 for a conceptual description). From Caplin's statement, the antecedent and the consequent cannot elide. However, his argument is limited to the Classical era. He contends that "an examination of the classical repertory reveals that an antecedent phrase does not elide with a consequent phrase."[64] Chopin, of course, belongs to the Romantic period, so it is possible to argue that the

[63] Burstein, 208.

[64] Caplin, 87.

elided cadence arises between the antecedent and the consequent. After all, one does not have to adhere to analytical requirements developed from a different, even if closely related, stylistic era.

The following discussion is consideration of how each possibility is related to the larger structure. The choice in mm. 56-57 creates two possibilities for the period (that is, the whole subordinate theme): it will be either a HC—PAC pair or an IAC—PAC pair. Regardless of the cadential decision, I would like to suggest that the HC - PAC pair is more common in the compound period. As Caplin asserts, "the compound antecedent usually closes with a half cadence (either regular or reinterpreted), but rarely with an IAC."[65]

In the analysis above, we have seen dual analytic possibilities. It is not my goal to persuade the reader to decide in favor of one or the other possibility. When it comes to cadential ambiguity, my intention is to establish a correlation between the conflicting possibilities and a performance decision. One does not have to determine which is more suitable. More importantly, it should be noted that different analytic interpretations give rise to different performances. The interrelationship between cadential analysis and performance decisions will be dealt with in Chapter 5.

[65] Caplin, 166.

CHAPTER 4

PERFORMANCE METHODS FOR THE TYPICAL PHRASE ENDING

In examining how to express cadences in performance, my research primarily relies on internal musical organization, as it relates to phrase structure and cadential areas. Many scholars mention similarities between phrase and language. Hermann Keller says that "phrasing is much like the subdivision of thought; its function is to link together subdivisions of musical thought (phrases) and to set them off from one another; it has thus the same function as punctuation marks in language."[66] William Newman argues that "a phrase implies a rise and fall - that is, a beginning, a climactic point, and an ending. Just as a sentence may have one or more subordinate clauses, so a phrase may have one or more lesser climaxes."[67] Therefore, pianists must present the specific moment at which the phrase ends by expressing the moment somewhat differently than the middle of phrase.

When pianists want to play certain moments differently, what specific aspects do they approach? They need to handle various musical elements such as dynamics, timing, timbre, and pedaling. Of these, this dissertation focuses on dynamics and timing, key elements in expression at areas of closure. Unfortunately, not all composers put dynamic and timing indications minutely in music scores, and therefore pianists might have difficulty in making cadences clear in their performances. Yet fortunately there definitely exist traditional practices in expressing closing boundaries, that is, cadential points. This is why this chapter examines some performance-related methods, benefitting from the great number of legendary piano pedagogues

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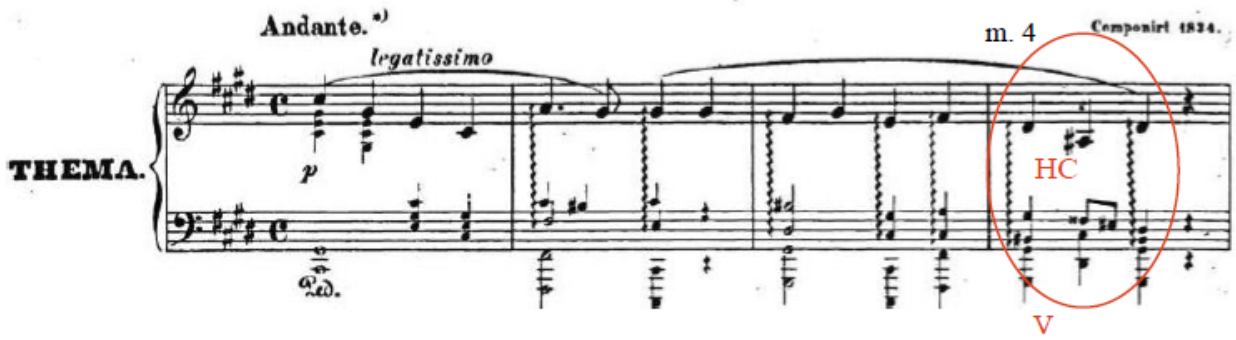
[66] Hermann Keller, *Phrasing and Articulation: A Contribution to a Rhetoric of Music, with 152 Musical Examples*, trans. Leigh Gerdine (New York: W. W. Norton, 1965), 4.

[67] William S. Newman, *The Pianist's Problems: A Modern Approach to Efficient Practice and Musicianly Performance* (New York: Harper & Row, 1974), 142.

who have addressed of dynamics and timing in performance guidebooks.

Before diving into the cadential problem (Chapter 5), I address the case of a cadence that is clearly and unambiguously defined. The Theme from Schumann's *Symphonic Etudes*, Op. 13, exemplifies a clear half cadence. The clarity of the cadence stems primarily from the rest at the end of m. 4.



Example 11: Schumann, *Symphonic Etudes*, Op. 13, Theme: clear half cadence, mm. 1-4

In Example 11, the opening phrase of 4-measure ends with a half cadence in m. 4. Performers have to express closure of the phrase. How do they shape the phrase? The following discussion will address this question.

4.1 Relationship between Dynamics and Phrase Ending

In expressing a phrase ending, we must take into consideration the role of dynamics. Dynamics and phrase are mutually related to each other. Howard Ferguson claims that "the shape of a phrase conditions its dynamics, and dynamics help to define the phrase. Hence it is important for the players to decide where the climax of a phrase occurs - it may or may not coincide with the melodic peak - and what relationship it bears to neighboring phrases."[68] In addition, Donald Barra says that "the key element in the phrasing of a musical composition is the

[68] Howard Ferguson, *Keyboard Interpretation from the 14th to the 19th century: An Introduction* (New York: Oxford University Press, 1975), 157.

performer's ability to create a sense of purposeful motion toward and away from specific points of reference on every level of musical development … The musical phrase itself, for example, is based upon the principle of the dynamic curve."[69] These statements support that manipulating dynamic levels significantly contributes to phrase ending in performance.

If so, performers should pay particular attention to how dynamics are adjusted. Theodor Leschetizky (1830-1915), one of the legendary piano pedagogues in Poland, delineates: "The subject of dynamics, or the science of force, deals with the use and variation of the different degrees of power in playing. There are but three main things to note - loudness, softness, and accent."[70] In order to discuss this matter, the physical aspect needs to be dealt with, and in most cases this is related to the motion of arm and wrist. According to György Sándor, another influential pedagogue, the arm and wrist have to be moved upward on a clearly defined phrase ending. "Why is the arm moved upward rather than downward? The reason is that a quietly tapered phrase ending is achieved by lifting the weight of the arm rather than by lowering it into the keys. The upward arm motion retards the fall of the damper and slows down the finger, while a downward arm motion would accelerate it."[71] He further says that "a pianist's sound is the direct result of his technique - of the motions he uses."[72]

I apply a practical strategy to Example 11. Since m. 4 rounds off the opening phrase, the performer is supposed to make a diminuendo. Of course, "the rounding off gives him concern because, at best, soft playing is more difficult than loud playing. Yet the rounding off is a prime

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[69] Donald Barra, *The Dynamic Performance: A Performer's Guide to Musical Expression and Interpretation* (Englewood Cliffs, N.J.: Prentice-Hall, 1983), 19.

[70] Malwine Brée, *The Leschetizky Method: A Guide to Fine and Correct Piano Playing*, trans. Arthur Elson (Mineola, New York: Dover Publications, 1997), 48.

[71] Sándor, *On Piano Playing*, 70.

[72] Sándor, 179.

requisite of good phrasing and just as important as the lift at the beginning."[73] Erwin Stein maintains that "not all the notes of a phrase have exactly the same volume of tone, even if they are on one dynamic level. Slight dynamic differentiations add to the coherence of a phrase. The subtle gradation of dynamics, and especially graded accentuation, is a means of phrasing."[74] On the D-sharp in the right hand, third beat of m. 4, performers need to move their arms upward with less weight in order to produce a delicate sound.

4.2 Relationship between Timing and Phrase Ending

I now examine timing, another musical element that contributes greatly to shaping a phrase. The term "timing" refers to rhythmic flexibility. The flexibility can occur, regardless of tempo marking, based on the shape of phrase to create better expression. Clive Brown argues that "there are a number of distinctly different ways in which, where no modification of tempo has been indicated by the composer, the steadiness of the beat can be manipulated by the performer for expressive purposes."[75] This means that the steady beat, that is, time, can be flexible to a certain extent in order to be musically expressive.

If so, when is timing needed? Usually it is needed at the beginning or ending of a phrase. According to Richard Collins, "a rising phrase needs more time at the climax, as a diminishing phrase needs more time as it dissolves. Sometimes an expansion and compression of time can occur within one hand, while the other maintains a steady even flow of pulses. This is the "rubato" referred to by Mozart and Chopin."[76]

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[73] Newman, *The Pianist's Problems*, 147.

[74] Erwin Stein, *Form and Performance* (New York: Limelight Edition, 1989), 57.

[75] Clive Brown, *Classical and Romantic Performing Practice 1750-1900* (New York: Oxford University Press, 1999), 376.

[76] Richard Collins, *Piano Playing: A Positive Approach* (Lanham, MD: University Press of America, 1986), 32.

As we have seen, the duration of notes can be flexible and varied according to the phrase structure. It goes without saying that pianists need to focus on what factors facilitate the variation in timing. First of all, timing is closely related to rubato, since playing rubato essentially means to adjust time, that is, rhythm and tempo in a narrow sense. *Grove Music Online* defines rubato as "the expressive alteration of rhythm and tempo."[77] Specifically, rubato means "to give slightly extra time to some notes of a phrase at the expense of others which will be equally slightly shortened, so that the give-and take of time balances. Rubato is, in many kinds of music, an essential contributing factor aiming to give greater freedom of expression."[78] Chopin greatly enjoyed using rubato. "Rubato is particularly associated with the music of romantic composers and, especially for pianists, with the works of Chopin."[79] Rubato and phrase structure are in a close relationship. "The value of every note is modified by the structure of the phrase and the place of the note within it. A degree of *rubato* is needed in almost any kind of music, and certainly in any melody of defined shape, though the application must vary in different styles."[80]

Another specific manner to adjust timing is breathing, which plays a significant role in artistically shaping a phrase for musicians, such as singers and wind players. Though not as much, pianists do breathe during their performances, either figuratively by raising the hands from the keys or literally by inhaling air. Although the latter is an obvious way, without doubt, both ways of breathing are necessary in expressing a phrase, especially at the cadential moment of the phrase.

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[77] Grove Music Online, s.v. "Rubato," by Richard Hudson, accessed August 13, 2019. https://libproxy.library.unt.edu:2147/10.1093/gmo/9781561592630.article.24039

[78] Kendall Taylor, *Principles of Piano Technique and Interpretation* (Borough Green, Sevenoaks, Kent: Novello, 1981), 66.

[79] Taylor, *Principles of Piano Technique and Interpretation*, 66.

[80] Stein, *Form and Performance*, 39.

In *Symphonic Etudes* (Example 11), m. 4 closes the first phrase. The half cadence happens in a G-sharp minor chord on the third beat of m. 4. The entire measure can be played with rubato; pianists might slightly slow down at the end of the measure. By means of the rubato, listeners will recognize the closure of the phrase. However, the rubato can by no means exceed the following bar line. In other words, after all cadences, the adjusted timing should be reset to the original steady tempo.

It is optional for pianists to breathe, in the sense of inhaling and exhaling, after playing the D-sharp. And not every cadence needs breathing: there is a quarter rest in m. 4, giving a temporal pause between the concluding phrase and the following phrase, without breathing. Certainly, one should avoid breathing in the middle of certain phrases, such as in the middle of m. 4, since breathing before the arrival of a cadence results in a separated feeling within the phrase.

CHAPTER 5

AN APPROACH TO SOLVING CADENTIAL AMBIGUITY

All performers should have the intention to create a more musically satisfying rendition. It is important for them to have the ability to render the musical work with a great sense of musicianship; phrasing, especially, is an indispensable aspect. The role of the phrase is emphasized by numerous musicians. Sándor argues that "one of the telling earmarks of good musicianship is the manner with which one ends a phrase: does the performer end the phrase gently or abruptly, does he use suitable or excessive motions?"[81] Moreover, Chopin said to his student Mikuli: "he who phrases incorrectly is like a man who does not understand the language he speaks."[82] As many musicians address how important an expression of the phrase is, pianists are required to pay close attention to the phrase, particularly the phrase ending.

This chapter discusses strategies for practicing and performing related to the problems of analysis and performance discussed in Chapter 4. The first movement of Chopin's Sonata No. 2 in B-flat minor, Op. 35 will be dealt with, specifically the ambiguous cadence point of the subordinate theme (mm. 56-57) discussed in Chapter 3. The sonata is an extremely well-known piece, played countless times from Chopin's time onwards by countless pianists. However, in spite of its popularity, few studies have been written about it due to its structural complexity. The cadential ambiguity presents a challenge to performers, and they need specific guidance based on an understanding of the piece's inner workings. This chapter is arranged according to each cadential possibility: half cadence then authentic cadence.

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[81] Sándor, 70.

[82] Keller, *Phrasing and Articulation*, 4.

5.1 The Half Cadence in m. 56 and Musical Elements

In my opinion, the performance strategy for the half cadence is less complicated than that for the IAC. From the HC point of view, the two phrases next to each other—the antecedent and the consequent—do not overlap, so performers can simply separate them. I delineate various performance-related aspects for the HC point of view, making use of dynamics and timing.

5.1.1 Dynamics

If performers decide on the half cadence stance on the third beat of m. 56, which is an A-flat dominant-seventh chord, the performance should be smoother and more delicate than in the other possibility. A feeling of musical tension will gradually increase from the beginning of the continuation phrase in m. 49, since there are successive crescendos starting there. Because of the crescendos, performers will naturally increase momentum with the tension. However, the tension sustained from during the continuation phrase needs to be undermined before the arrival of the V7 so that the dynamic can draw back. And although this drawing back essentially contradicts the crescendo marking, whoever agrees with the HC stance will abide by this way of expression. I ask those who decide on the crescendo: What if they produce a louder, instead of softer, sound on the V7? Then listeners will receive the impression that the phrase is still going on. For this reason, it is thoroughly recommended to performers that they make a diminuendo rather than a crescendo, although this interpretation contradicts the dynamic marking.

As this dissertation aims to offer a performance tactic, I bring up some physical matters on dynamics for those who support a HC. Adjusting dynamics depends largely on a movement of arm and wrist. This is supported by Leschetizky: “in a crescendo, the wrist may be loose at first and become stiff gradually. For a diminuendo the reverse is true, the stiff wrist gradually

relaxing."[83] In addition, Sándor argues that "the use of the entire arm and very flexible joints produces an extremely light and gentle sound."[84] As a result, performers have to gradually relax their wrists on the V7 chord in m. 56. It would be helpful for them to slightly lift their wrists in order to producing a softer sound.

Another good way of using arm motion is addressed by Silvio Scionti, who was a pianist and teacher: "one should carefully contract the upper muscles, thereby suspending the weight from the keys. To make this clearer, imagine the forearm raised a few inches from the keyboard while the upper arm remains in its normal position. This causes the contraction of those upper muscles with the complete relaxation of the hand and fingers."[85]

In addition to the arm and wrist motion, I bring up the issue of fingering because it has a definite impact on producing a soft and delicate sound. Josef Hoffmann says that "by earnest thinking every player can contrive the fingering that will prove most convenient to him."[86] As he argues, all performers tend to employ the most comfortable fingers for certain passages. In Chopin's example, most pianists will commonly use the 1-2 fingers of the right hand on the G-flat and C of the V7. In a rare case that pianists take the 2-4-5 fingers on the first beat of m. 56 instead of 1-2-3, they might use 1-3 on the V7 chord. Unfortunately, the first finger is the strongest finger and, to make matters worse, no better options are permitted because of the figuration. In any case, it is unavoidable to use strong fingers, which might produce a somewhat heavy sound for the inner voice. According to the Leschetizky's method, "loud notes should be

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[83] Brée, *Leschetizky Method*, 48.

[84] Sándor, 180.

[85] Silvio Scionti, *Essays on Artistic Piano Playing and Other Topics*, ed. Jack Guerry (Denton, TX: University of North Texas Press, 1998), 9.

[86] Josef Hofmann, *Piano Playing: With Piano Questions Answered*, with a new introduction by Gregor Benko (New York: Dover Publications, 1976), 36.

played by strong fingers."[87] In Chopin's sonata, since the inner voice of the V7 chord is not loud, pianists have to consciously avoid dropping the thumb. Rather, on A-flat dominant chord just touch the key surface and play the chord as smoothly as possible for a softer sound.

We have seen how much delicacy is needed on the V7 chord in D-flat major. While the dynamic on the V7 is differently interpreted in accordance with the cadential decision, the beginning of the consequent phrase in m. 57 is interpreted in only one way. Since the dynamic is marked *forte* here, performers undoubtedly play loudly. However, performers need to take into account the tone E natural in m. 56. Should it be soft, or should it be loud? In order to discuss this, we need to investigate to which phrase it belongs. The analysis in chapter 3 reminds you that the E natural is a lead-in. According to Caplin, "with a lead-in, we have the impression that its melodic material belongs neither to the weak cadence (at the end of the antecedent) nor to the return of the basic idea (at the beginning of the consequent). In other words, a lead-in could easily be eliminated without upsetting the melodic, harmonic, and formal organization of the phrases."[88] As a result, I would assert that the E natural can be played either softly or loudly, and this totally depends on the performers' choice.

5.1.2 Timing

Timing is adjusted by the use of rubato. As mentioned in chapter 4, using rubato acts as a device for manipulating the shape of a phrase. Beryl Rubinstein states that "the mission of the rubato is to enhance the beauty and meaning of a phrase; to prevent, by its subtle irregularity, a stiffness and artificiality of design; and to give emphasis, by a sort of hovering on them, to the

[87] Brée, *Leschetizky Method*, 56.

[88] Caplin, 86.

essential notes of a phrase."[89] Although rubato is beneficial for phrase expression, performers should not overuse it. They need to consciously regulate the duration of the rubato; that is, decide the range of where it starts and where it ends. I would suggest that performers do not need a large rubato to create the phrase. If they overextend the rubato, they will lose energy. Since the half cadence in most cases, except for the end of the development, does not require a big arrival, I think the phrase ending should not be emphasized. Therefore, one measure, or less, will be sufficient. As mentioned above, the lead-in does not belong to the antecedent, so I would argue that the rubato should round off on the HC and return to the original tempo on the lead-in.

In addition to the rubato, timing is adjusted by breathing as well. In order to illustrate HC, performers must breathe before the following phrase begins, definitely somewhere in m. 56. With respect to a specific moment, considering the independent nature of the lead-in, it is advisable that performers breathe before it. For fluent musical expression, as Sándor specifies "we associate upward motions with inhaling and downward motions with exhaling,"[90] so performers may inhale on the HC closure lifting the arms up, then exhale immediately. Careful attention is needed. If the phrase is in a slow tempo, or a decreased surface rhythm, breathing should be slow and smooth. "Rapid and short breathing generates a hectic mood, and, in general, melodic and rhythmic distortions are caused by excessive muscular contractions in and around the respiratory system."[91] In Chopin's example, the phrase decelerates in rhythmic activity, so performers should breathe smoothly.

Now I address how the vertical wavy line, the arpeggio, will be performed differently on

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[89] Beryl Rubinstein, *Outline of Piano Pedagogy: A Series of Papers Setting Forth the Aims and Objectives of Piano Instruction with Suggestions for Solving Manifold Problems Confronting the Serious Teacher* (New York: Fischer, 1947), 35.

[90] Sándor, 70.

[91] Sándor, 8.

the basis of the cadence identification. From the HC point of view, the notes of the arpeggio can be played quite rapidly, almost together. Of course, this should sound fluently and musical. Basically, when playing the arpeggio, pianists need to give more weight to the highest note than the others because the highest note is typically part of the main melodic line. Of course, in m. 57 of the Chopin Sonata, the highest A-flat is definitely part of the principal melody line. Performers need to pass through the two lower notes of the arpeggio and arrive on the A-flat with a more projected tone. The A-flat is a black key and, to make matters worse, the F is played with the thumb, so performers should pay particular attention to avoiding the dropping the thumb. Instead, they need to slightly raise the upper arm when playing the black key.

5.2 The Authentic Cadence in m. 57 and Musical Elements

If performers agree with the authentic cadence stance, they need to be more cautious about expressing the phrase ending. Compared to the HC supporters, those who agree with the IAC encounter a more complicated situation. This is because in m. 57 the downbeat, which is a tonic harmony, serves as both a closure of the antecedent phrase and an opening of the consequent phrase at the same time (as I have mentioned earlier, this is called an elided cadence). If performers overlook that the cadence is elided, only focusing on the phrase ending, the performance will be less convincing. To avoid this, I offer some suggestions.

5.2.1 Dynamics

In opposition to the HC, the crescendo can reach toward m. 57, as marked in the score, concluding the phrase with the crescendo. This way of performing is opposite to the typical phrase ending. As shown in the Chapter 4, the great majority of cadences end with a falling inflection. Nevertheless, “there is such a thing as “rising” inflection at the end of a musical idea or phrase. This is prompted sometimes by an exciting rise in the melody, or by a modulation, or

possibly … by the desire of the composer to emphasize a conclusion and say something striking and startling."[92] I would argue that the crescendo marking is authentic, since it is shown in Chopin's manuscript (see Appendix A). In addition, I checked several editions including the first, authorized one, and discovered that most of the editions contain the crescendo and *forte* marking in m. 57. Scionti declares that "if a composer writes *forte* he wants it heard; it is the same with any kind of dynamic marking."[93] This is why, while playing Chopin's example, performers should keep the crescendo until m. 57. Although the HC supporters go against the dynamic indications, there is no need for the IAC supporters to do that.

More importantly, from the perspective of the IAC, the note F is not merely a part of the arpeggio; it simultaneously belongs to a melody line: E-flat-E-F. Sometimes performers tend to miss a voice-leading detail for a variety of factors. Foote says that "piano music is so loosely written that players are apt to overlook the presence of real voice parts; such parts often exist in music that is not obviously polyphonic. It may also be the case that there is a melody (perhaps in an inner voice) that is not indicated as such."[94] In Chopin's example, the real voice might not be obviously recognizable because of the arpeggio texture. What happens if they regard the F as portion of the arpeggio and play it too softly? The voice-leading of the phrase would be unresolved and incomplete. This is why performers must make sure that the voice-leading of the antecedent should be resolved to the F note in m. 57. Of course, I do not mean to emphasize the F too much; but compared with the HC stance the F at least should be projected more. This is in accordance with the principle that "the degree to which the melody tone should be brought out in

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[92] Richard McClanahan, *The Cadence, Key to Musical Clarity: A Simple and Practical Approach to Clear Phrasing* (self-pub., 1970), 23.

[93] Scionti, *Essays on Artistic Piano Playing*, 25.

[94] Arthur Foote, *Some Practical Things in Piano Playing* (Boston: Arthur P. Schmidt, 1909), 22.

chords naturally varies widely with the expressive intent of the music."[95]

Now, I discuss what factors specifically contribute to the dynamics. Considering Leschetizky's method mentioned above, in order to keep the crescendo with raised tension, performers should retain stiff wrists until the voice-leading resolves in m. 57. Also, they need to keep using the weight of the arms until m. 57 by lowering them and the wrists as well. According to Sándor, "at the beginning, we always use a relatively low wrist, hand, and arm position, and at the end of a group, the wrist, hand, and arm position is higher."[96] If the downbeat of m. 57 is a typical phrase ending where the dynamic becomes delicate at the end, the wrist, hand, and arm move upward. However, since the ending is an elided cadence and, what is more, the dynamic intensifies, the arm including the wrist and hand should remain lowered.

Besides the physical factor, performers should intensify the emotional tension as well. Emotions closely have something to do with physical motions. Sándor says that "just as motions and sounds are interrelated, so are motions and emotions. Sounds are the result of motions, and motions must correspond to emotions.… The degree and intensity of a pianist's feelings are expressed by the motions of his physical organism; these motions are transmitted through the piano and generate the same responses in the listener."[97] Consequently, I would like to argue that if sounds, motions, and emotions are all correlated, performers need to raise the tension not only by means of physical motion but also by their emotions in order to produce intensified dynamics.

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[95] Newman, 118.

[96] György Sándor, 117.

[97] György Sándor, 4.

5.2.2 Timing

One might be naturally tempted to make a brief pause after the arrival on D-flat in m. 57. This would make complete sense in the common IAC case. However, because, as discussed in Chapter 3, the IAC coincides with the onset of the following consequent phrase, which blurs the formal boundary, pianists should not take extra time after the arrival of D-flat tonic. Instead, they need to move forward. Some people might bring up the problem caused by a large upward leap in the left hand. It is undeniable that a short time will necessarily be taken to leap upwards. Nevertheless, I would assert that performers need to make the time as short as possible, because the tonic chord is the point of an overlapped phrase.

The proponent of the HC can breathe in m. 56. In contrast, those of the IAC will have trouble in breathing because of the elision. If the IAC supporters breathe in m. 56 as the HC supporters, listeners would feel like the phrase is separated at that moment. It is also not permitted for performers to breathe in m. 57, since the following phrase should be ongoing. This is quite a difficult matter. To make matters worse, the expanded continuation within the consequent (mm. 65-81) requires consistent momentum and energy. Therefore, I suggest it would be best to delay breathing until m. 81, where the subordinate theme (mm. 41-81) finally closes with the PAC.

As for the arpeggio strategy, although the HC supporters can play the arpeggio figuration quite fast, the IAC supporters may not to do that. As I have argued the lowest note (F) should be audible in the IAC case. If it is played too fast listeners might not recognize the F as the part of the melody involved in closing the phrase (m. 57). Instead, it would be better for performers to spread out their fingers slowly in a calm and relaxed manner.

CHAPTER 6

CONCLUSIONS

It is essential for performers to spend time in analyzing musical works they will perform for the purpose of a more musically convincing rendition. Janet Schmalfeldt stresses the importance of analysis for performers by saying that "whereas the analyst can speak and write about a work without having to perform it, the performer's presentation will, for better or worse, reflect his "analysis"; the performer commits himself to a compositional re-creation, in which his physical skills as well as his intellectual and spiritual rapport with the work are on the line."[98] Especially, defining a phrase boundary is a significant task for performers. This is why, although this dissertation acts as a performance guide, I have provided an analysis of an ambiguous point of phrase boundary in the first movement of Chopin's Piano Sonata No. 2 in B-flat minor, Op. 35. Since the dissertation explores a dual possibility for cadence identification (authentic or half cadence), I have focused on the cadential ambiguity in the sense of the formal structure. The ultimate purpose is to suggest ideas on performance, and thus I have associated the cadential ambiguity with a performance decision.

The opening chapter was subdivided into four parts. In Chapter 1.1, I posed the analytical and theoretical problem for which I employed Clementi's Piano Sonata Op. 24 No. 2, 1st movement. Due to the cadential ambiguity, two possibilities were given in closing the main theme (mm. 1-12). By presenting the example from Clementi, I briefly showed readers what my dissertation accomplished in the following chapters. In Chapter 1.2, I reviewed several publications on the topic related to my dissertation. Two theorists, William Caplin and Poundie

[98] Janet Schmalfeldt, "On the Relation of Analysis to Performance: Beethoven's "Bagatelles" Op. 126, Nos. 2 and 5," *Journal of Music Theory* 29, no. 1 (Spring 1985): 1.

Burstein, were mentioned and their books and articles were addressed. In this chapter, I argued that this dissertation would be indispensable for performers. This is because, compared with theorists, performers have generally paid scant attention to cadential ambiguity.

The following two sections within the Chapter 1 (Chapter 1.3&1.4), I introduced methods for both the analysis part and the performance part respectively. Drawing on the theoretical work of William E. Caplin, I adopted his understanding of cadence as a "stop" rather than an "end," and borrowed his definitions of four types of cadence. Two of those types, half cadence and imperfect authentic cadence, are alternative ways to understand the cadential ambiguity in the Chopin sonata. In addition, performance-related methods were briefly introduced in this section. I reported that Jan Ekier's edition will be used; his edition is the most authoritative edition of the Chopin's composition.

In Chapter 2, I reviewed what some scholars have written about the cadence. I dealt with the nature of cadences, in Chapter 2.1, on the basis of currently existing literature. Besides typical statements with regard to the cadence, I delineated Caplin's definition as he narrowed down its notion. According to his argument, it is a sense of formal closure that creates cadences. In other words, harmonic, melodic, rhythmic closure does not affect an occurrence of the cadence. Moreover, Chapter 2.2 illustrated various types of the cadence. This section briefly outlined different types of the cadence, but focused more on two conflicting cadences which were the main issue in this research - the half cadence and the authentic cadence.

In Chapter 3, I first analyzed the exposition of the first movement in order to deal with the larger-scale form of the movement. After the overview of the exposition, I discussed the cadential ambiguity which was the main issue of this dissertation. The ambiguous cadence happened in the antecedent phrase within the subordinate theme. Two cadential possibilities (HC

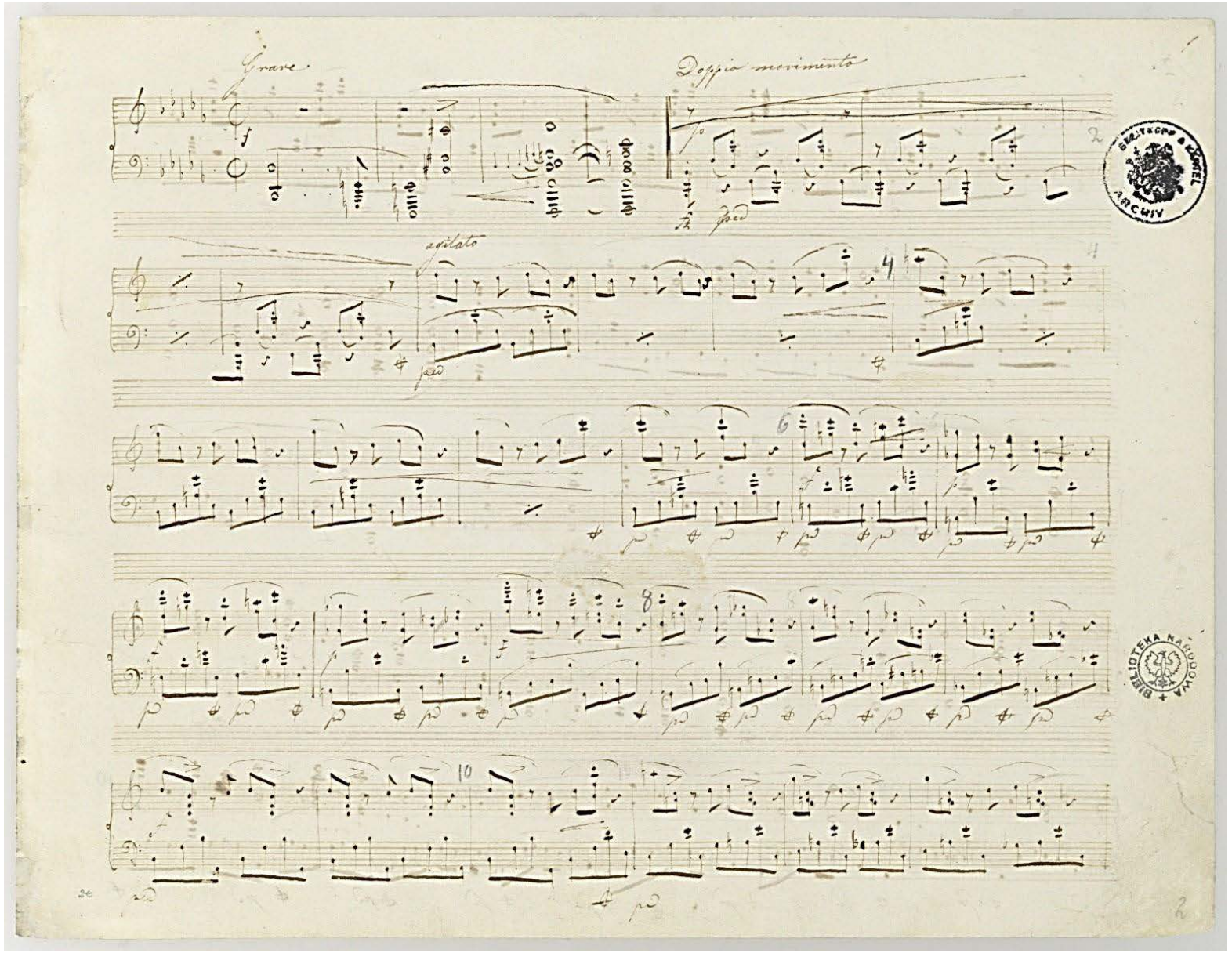
or IAC) and supporting ideas for each one were given. While discussing the movement, Caplin's terminology and Poundie Burstein's article were chief sources.

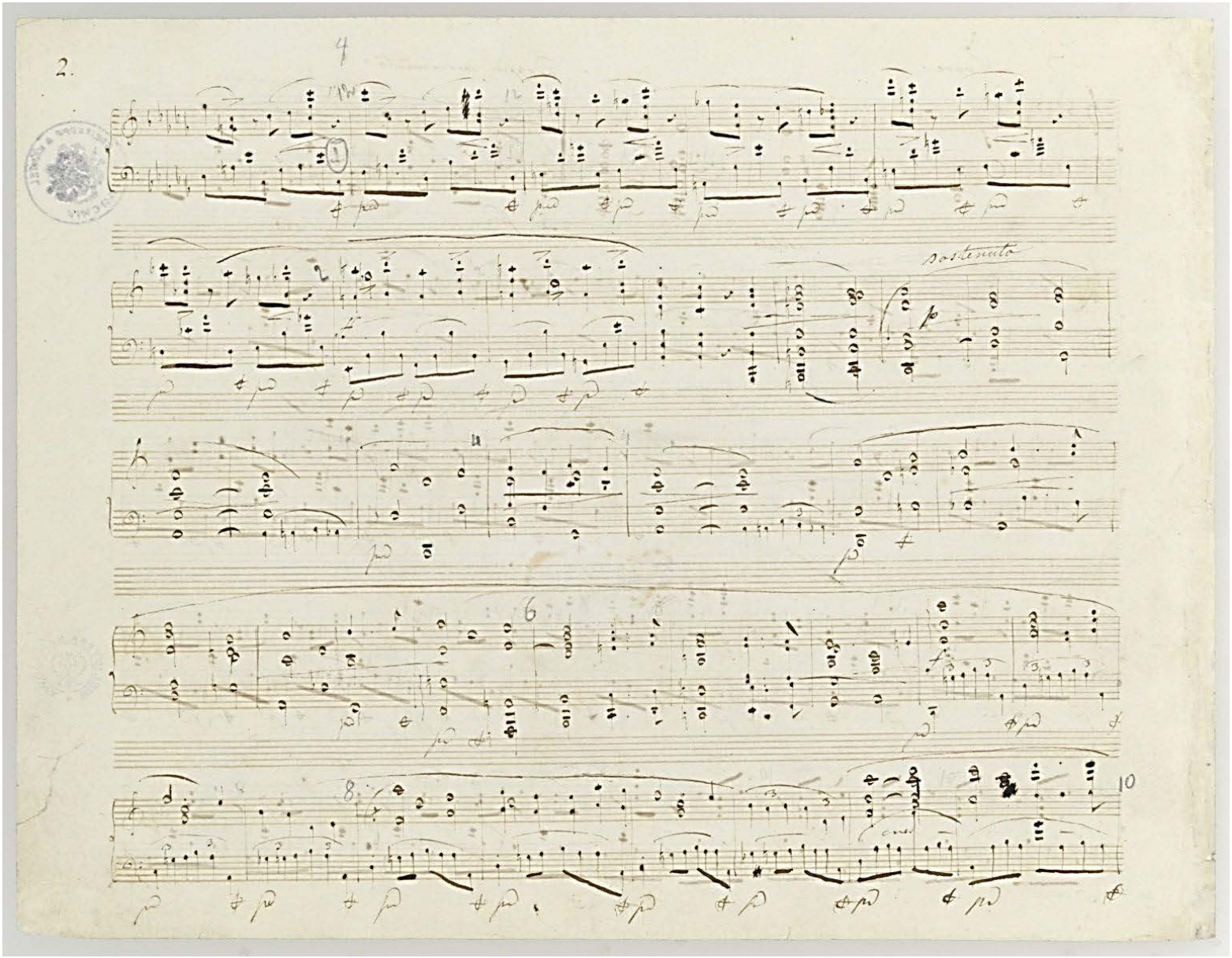
In Chapter 4, I then drew upon the work of significant piano pedagogues of the twentieth century, such as György Sándor, as to how pianists can deal with phrase endings. This chapter consisted of two sections. One explored a relationship between dynamics and phrase ending, and the other investigated a relationship between timing and phrase ending.

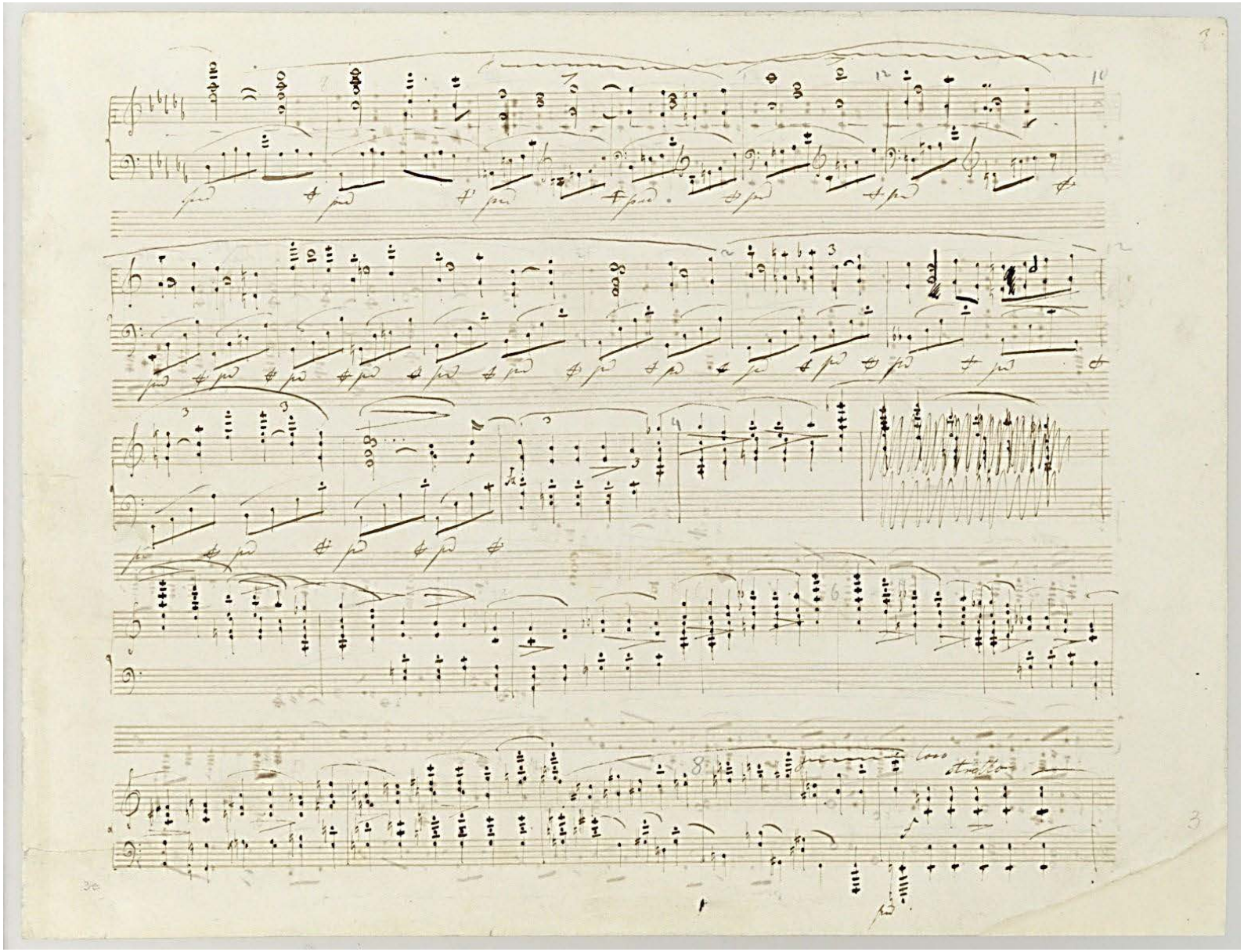
The last chapter, Chapter 5, focused on practicing and performing strategies related to the cadential problem discussed in previous chapters. I described two musical elements, dynamics and timing, in a large sense by covering a variety of musical, technical and physical issues. Dynamics may be associated with arm motions, and timing with the use of rubato, breathing, and arpeggiation of a chord with an arpeggio sign. I argued that manipulating these factors can affect shaping of the phrase structure, particularly at the cadence. Ultimately, I hope that this chapter will be of benefit to pianists who are concerned about how the phrase ending in the Chopin sonata should be performed, and by extension, any phrase endings.

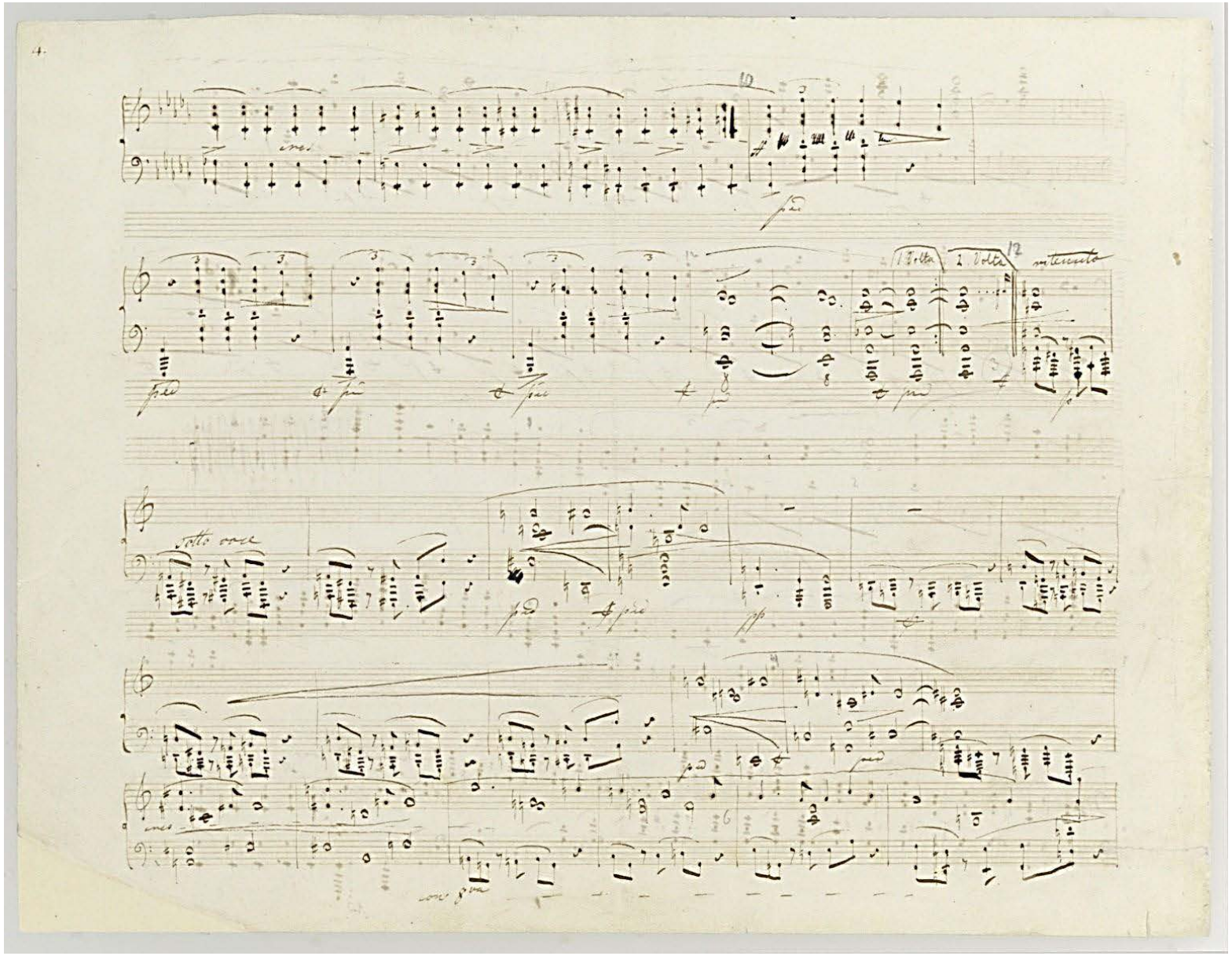
APPENDIX A

A MANUSCRIPT OF CHOPIN'S EXAMPLE (EXPOSITION)


Grave.
Doppia movimento
agitato
ped
BIBLIOTEKA NARODOWA
ARCHIV

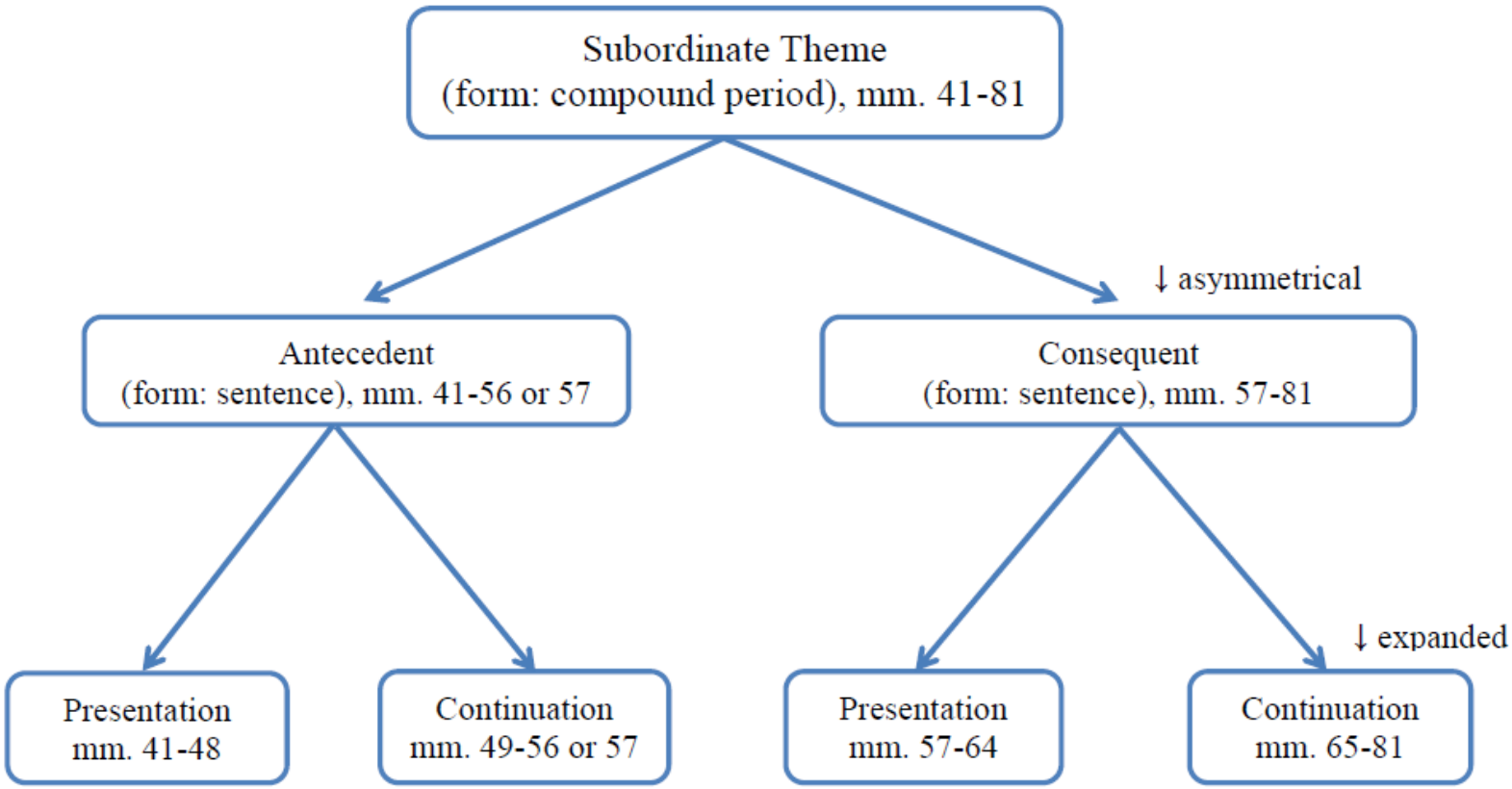

2.
4
sostenuto
6
8
10




4.
1 Volta
2 Volta
sotto voce

APPENDIX B

A SUBORDINATE THEME CHART


Subordinate Theme
(form: compound period), mm. 41-81
↓ asymmetrical
Antecedent
(form: sentence), mm. 41-56 or 57
Consequent
(form: sentence), mm. 57-81
↓ expanded
Presentation
mm. 41-48
Continuation
mm. 49-56 or 57
Presentation
mm. 57-64
Continuation
mm. 65-81

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